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Report No: PAD3000

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED GRANT

IN THE AMOUNT OF SDR 25.3 MILLION
(US$35 MILLION EQUIVALENT)

TO THE

REPUBLIC OF HAITI

FOR A

STRENGTHENING DISASTER RISK MANAGEMENT AND CLIMATE RESILIENCE PROJECT

April 25, 2019

Social, Urban, Rural And Resilience Global Practice
Latin America And Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective March 31, 2019)

Currency Unit =	Haitian Gourdes (HTG)
HTG 84.10 =	US$1
US$ 1 =	SDR 0.72033135

FISCAL YEAR
October 1 - September 30

Regional Vice President:	Axel van Trotsenburg
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ABBREVIATIONS AND ACRONYMS

BTB	Technical Bureau for Buildings (*Bureau Technique du Bâtiment*)
CASEC	Administrative Council of the Communal Section (*Conseil d'Administration des Sections Communales)*
CBO	Community Based Organization
CCPC	Municipal Civil Protection Committees (*Comités Communaux de Protection Civile*)
CDPC	Department Civil Protection Committees (*Comités Départementaux de Protection Civile)*
CERC	Contingent Emergency Response Component
CNIGS	National Center for Geospatial Information (*Centre National de l'Information Géospatiale*)
CPF	Country Partnership Framework
DPC	Civil Protection Directorate (*Direction de la Protection Civile*)
DRM	Disaster Risk Management
PROReV	Emergency Bridge Reconstruction and Vulnerability Reduction Project (EBRVRP)
ERDMP	Emergency Recovery and Disaster Risk Management Project
ERR	Internal Rate of Return
ESMF	Environmental and Social Management Framework
ESMPS	Environmental and Social Management Plans
EU	European Union
EWS	Early Warning System
FCV	Fragility, Conflict and Violence
GDP	Gross Domestic Product
GIS	Geographic Information System
GoH	Government of Haiti
GRM	Grievance Redress Mechanism
IIERP	Infrastructure and Institutions Emergency Recovery Project
ISM	Implementation Support Missions
MDOD	Delegated Implementing Agencies (*Maître d'Ouvrage Délégué)*
MDUR	Municipal Development and Urban Resilience Project
MENFP	Ministry of National Education and Vocational Training (*Ministère de l'Éducation Nationale et de la Formation Professionnelle*)
MICT	Ministry of Interior and Local Authorities (*Ministère de l'Intérieur et des Collectivités Territoriales*)
MPCE	Ministry of Planning and External Cooperation *(Ministère de la Planification et de la Coopération Externe*)
MTPTC	Ministry of Public Works, Transport and Communications (*Ministère des Travaux Publics, Transports et Communications*)
MTR	Mid-Term Review
NDC	Nationally Determined Contribution
NPV	Net Present Value

PARDH	Action Plan for National Recovery and Development of Haiti (*Plan National d'Action pour la Reconstruction et le Développement d'Haïti*)
PDO	Project Development Objective
PEQH	Providing an Education of Quality in Haiti Project
PIU	Project Implementation Unit
PPSD	Project Procurement Strategy for Development
PREKAD	Port-au-Prince Neighborhood Housing Reconstruction Project (*Projet de Reconstruction des Quartiers Défavorisés de Port-au Prince*)
PRGRD (or DRMRP)	Disaster Risk Management and Reconstruction Project *(Projet de Reconstruction et de Gestion des Risques et Désastres*)
PRODEPUR	Urban Community Driven Development Project (*Projet de Développement Participatif Urbain*)
PSDH	Strategic Development Plan of Haiti (*Plan Stratégique de Développement d'Haïti*)
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SCD	Systematic Country Diagnostic
SNGRD	National Disaster Risk Management System (*Système National de Gestion des Risques et Désastres*)
SPGRD	Permanent Secretariat of Disaster Risk Management *(Secrétariat Permanent de Gestion des Risques et des Désastres)*
TA	Technical Assistance
VAWG	Sexual violence against women and girls
WMO	World Meteorological Organization

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Haiti	Strengthening DRM and Climate Resilience Project	
Project ID	**Financing Instrument**	**Environmental Assessment Category**
P165870	Investment Project Financing	B-Partial Assessment

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[✓] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[✓] Fragile State(s)
[ ] Disbursement-linked Indicators (DLIs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
16-May-2019	30-Apr-2025

Bank/IFC Collaboration

No

Proposed Development Objective(s)

The Project Development Objective is to improve: (i) early warning and emergency evacuation capacity in selected municipalities in high climate risk-prone areas, and (ii) the provision of and accessibility to safe havens.

Components

Component Name	Cost (US$, millions)
Strengthening Disaster Preparedness and Emergency Response Capacity; and Promoting Building Regulation and Resilient Construction Practices	8.00
Construction and Rehabilitation of “Safe Havens”	23.00
Contingent Emergency Response	0.00
Project Management and Implementation Support	4.00

Organizations

Borrower:	Ministry of Economy and Finance
Implementing Agency:	Ministry of Interior and Local authorities

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	35.00
Total Financing	35.00
of which IBRD/IDA	35.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	35.00
IDA Grant	35.00

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
National PBA	0.00	10.00	0.00	10.00
Crisis Response Window (CRW)	0.00	25.00	0.00	25.00

Total	**0.00**	**35.00**	**0.00**	**35.00**

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2019	2020	2021	2022	2023	2024	2025
Annual	0.00	4.50	4.50	7.00	10.00	7.00	2.00
Cumulative	0.00	4.50	9.00	16.00	26.00	33.00	35.00

INSTITUTIONAL DATA

Practice Area (Lead)

Social, Urban, Rural and Resilience Global Practice

Contributing Practice Areas

Education

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Gender Tag

Does the project plan to undertake any of the following?	
a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF	Yes
b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment	Yes
c. Include Indicators in results framework to monitor outcomes from actions identified in (b)	Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	High
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Moderate

5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	High
7. Environment and Social	Substantial
8. Stakeholders	Substantial
9. Other	
10. Overall	Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✓	
Performance Standards for Private Sector Activities OP/BP 4.03		✓
Natural Habitats OP/BP 4.04		✓
Forests OP/BP 4.36		✓
Pest Management OP 4.09	✓	
Physical Cultural Resources OP/BP 4.11	✓	
Indigenous Peoples OP/BP 4.10		✓
Involuntary Resettlement OP/BP 4.12	✓	
Safety of Dams OP/BP 4.37		✓
Projects on International Waterways OP/BP 7.50		✓
Projects in Disputed Areas OP/BP 7.60		✓

Legal Covenants

Sections and Description
IDA Financing Agreement Schedule 2, Section I.E- MDOD: For purposes of carrying out Component 2 of the Project, the Recipient shall no later than four (4) months after the Effective Date, contract at least one MDOD in accordance with the Procurement Regulations

Conditions

Type	Description
Disbursement	IDA Financing Agreement Schedule 2, Section III.B 1(a): No withdrawal shall be made under Category (3), for Emergency Expenditures under Component 3 of the Project, unless and until the Association is satisfied, and has notified the Recipient of its satisfaction,that all of the following conditions have been met in respect of said Emergency Expenditures: (i) the Recipient has determined that an Eligible Emergency has occurred, has furnished to the Association a request to include said Eligible Emergency under Component 3 of the Project in order to respond to said Eligible Emergency, and the Association has agreed with such determination, accepted said request and notified the Recipient thereof; (ii) the Recipient has prepared and disclosed all safeguards instruments required for said Eligible Emergency, and the Recipient has implemented any actions which are required to be taken under said instruments, all in accordance with the provisions of the Financing Agreement; (iii) the Coordinating Authority has adequate staff and resources, in accordance with the provisions of the Financing Agreement, for the purposes of said activities; and (iv) the Recipient has adopted the Emergency Response Operations Manual in form, substance and manner acceptable to the Association and the provisions of the Emergency Response Operations Manual are fully current in accordance with the provisions of the Financing Agreement, so as to be appropriate for the inclusion and implementation Component3 of the Project;
Type	Description
Disbursement	IDA Financing Agreement Schedule 2, Section III.B 1(b): No withdrawal shall be made under Category (5) unless the pertinent RAP has been prepared, consulted, adopted and published by the Recipient in form and substance satisfactory to the Association, and in accordance with the Financing Agreement.

I. STRATEGIC CONTEXT

A. Country Context

1. **Haiti's geography, people, and history provide it with many opportunities.** The third largest Caribbean nation by area and population (11 million in 2017), Haiti benefits from proximity and access to major markets, a young labor force, a dynamic diaspora, and substantial geographic, historical, and cultural assets. The country possesses untapped markets and a pent-up demand for the private sector to explore, including agribusiness, light manufacturing, and tourism[1].

2. **Haiti is the poorest country in the Western hemisphere, with a GDP per capita of only US$766 in 2017[2].** According to the 2014 Poverty Assessment completed by the Government of Haiti (GoH, the Government) and the World Bank, the proportion of Haiti's population living in extreme poverty declined from 31 percent to 24 percent from 2000 to 2012. Historically, political violence and instability have been both a symptom and a driver of fragility in Haiti. Recurrent episodes of institutional instability and civil unrest have severely impaired its progress in poverty reduction.

3. **Haiti is highly exposed to natural hazards primarily hurricanes, floods and earthquakes[3].** Over 93 percent of its surface and more than 96 percent of the population are exposed to two or more hazards. Hydro-meteorological hazards are related to the precipitation caused by northern polar fronts, tropical cyclones (mainly from June to November), and waves. El Niño/El Niño-Southern Oscillation episodes have tended to delay the arrival of the rainy season, creating drought conditions, and increasing the number and intensity of hurricanes. Additionally, the interaction of the Caribbean and North American tectonic plates causes seismic hazards. Other secondary hazards include landslides, torrential debris flows, soil liquefaction, and tsunamis. The Great South (*Grand Sud*), which includes the Grande Anse, Nippes and Sud Departments, is greatly exposed to hurricane and related flood hazards, and the Nord and Nord Ouest Departments are highly exposed to floods and tsunami.

4. **Climate change is expected to increase the frequency and severity of hydro-meteorological hazards.** Climate projections for the Caribbean estimate that temperatures could rise from between 0.5 to 2.3°C by 2060[4], possibly leading to cyclonic events of increased duration and intensity. According to the climate change simulations of the U.S. Climate Change Science Program, for each 1°C increase in sea surface temperatures, rainfall caused by hurricanes may rise by 6 to 17 percent and surface wind speeds of the strongest hurricanes by 1 to 8 percent[5]. In addition, the dry season will likely intensify further with an increase of between 8 percent to 19 percent of the present duration. Likewise, increases in maximum temperatures have led to greater propensity for extreme rainfall events and flash floods in recent years; this pattern is expected to worsen with the effects of climate change.

5. **The human and economic impacts of disasters have been extremely severe, given Haiti's exposure to hydrometeorological and seismic hazards, the high vulnerability of its infrastructure, the unplanned urban expansion, and institutional fragility.** Between 1961 and 2012, the country experienced more than 180 disasters, which caused the

[1] Country Partnership Framework for the Republic of Haiti FY16-FY19 (Report No. 98132-HT).
[2] World Bank national accounts data, and OECD National Accounts data files 2016.
[3] Haiti Country Risk Profile, World Bank 2018.
[4] Haiti's First National Communication for UNFCCC, Haiti Ministry of Environment.
[5] Climate Risk and Adaptation Country Profile: Haiti, Vulnerability, Risk Reduction, and adaptation to Climate Change, World Bank, GFDRR, Climate Investment funds, 2011.

death of more than 240,000 people[6], including the death of about 220,000 people after the 2010 earthquake. In 2016, Hurricane Matthew affected over two million people, resulted in over 500 deaths and displaced 175,000 people. Between 1976 and 2012, damages and losses associated with hydro-meteorological events alone amounted on average to the equivalent of almost two percent of annual GDP. Hurricane Matthew resulted in estimated damages and losses equivalent to around 32 percent of GDP and the 2010 earthquake destroyed the equivalent of about 120 percent of GDP. The potential future maximum losses from hurricanes and earthquakes occurring within a 250-year return period[7] are estimated at US$1.6 billion (13.3 percent of 2016 GDP) and US$2.41 billion (27.5 percent of 2016 GDP), respectively[8].

B. Sectoral and Institutional Context

Sectoral Context

6. **Following the 2010 earthquake, the GoH identified Disaster Risk Management (DRM) as a key cross-cutting and multi-sectoral priority.** The 2010 Action Plan for National Recovery and Development of Haiti (PARDH) outlines "preparation for the hurricane season and disaster risk management" as a priority. The Government's 2012 Strategic Development Plan (PSDH) prioritizes the improvement of DRM through better land-use planning under its first pillar. Haiti's Nationally Determined Contribution (NDC), submitted to the UNFCCC[9] in September 2015, focuses on both adaptation to climate change and mitigation actions for the 2016-2030 period. Considering the prevalence of vulnerability and heavy casualties incurred during the major disasters, the Government has prioritized emergency response and preparedness as a major national priority, with a particular emphasis on saving lives.

7. **In order to reduce the number of fatalities, as well as economic damages and losses caused by disasters, Haiti needs to address critical gaps in: (i) emergency preparedness and response to adverse hydrometeorological events, and (ii) vulnerability reduction of infrastructure in relation to earthquake hazards.** The proposed Strengthening Disaster Risk Management and Climate Resilience Project (the Project) provides a combination of activities aimed at addressing these gaps. Regarding hydrometeorological hazards, project activities will focus on strengthening emergency preparedness and response capacity at the municipal level, improving early warning systems, and expanding the network of emergency evacuation shelters. Regarding earthquake hazards, dedicated technical assistance (TA) on safe construction practices will contribute to reducing the vulnerability of infrastructure.

8. **To ensure effective preparedness and response to hydrometeorological hazards, emergency evacuation capacity at the municipal level needs to improve.** The backbone of Haiti's emergency preparedness and response function is a network of well-organized volunteer organizations, or Municipal Civil Protection Committees (*Comités Communaux de Protection Civile – CCPC*), comprised of community members[10]. A total of 140 CCPCs (one CCPC per municipality), have been created covering the entire country. These CCPCs comprise 3,500 trained volunteers that have been instrumental in evacuating the population and saving lives after the major natural disasters, most recently during

[6] An event is considered a disaster by the EM-DAT database if: (i) it caused at least 10 deaths; (ii) affected at least 100 people; (iii) caused an emergency declaration, or (iv) led to a call for international assistance. Source: "Diagnostic on the Economic and Fiscal Impact of Disasters in Haiti" World Bank 2014.
[7] Indicative of an extreme event.
[8] Haiti Country Disaster Risk Profile, World Bank 2017.
[9] United Nation Framework Convention on Climate Change.
[10] Community members include private citizens, brigadiers, nurses, church leaders, members of community-based organization (CBOs), members of the Administrative Council of the Communal Section (CASECs), dignitaries, teachers, local police and officials from the municipalities.

Hurricane Matthew. Despite the significant progress made in recent years[11], CCPCs still require significant support to maintain and improve capacities. CCPCs' ability to operate is vulnerable to high volunteer turnover, as the volunteers are not entitled to benefits, insurance, or reimbursement of expenses. Therefore, a continuous and substantial capacity building effort is necessary to maintain CCPCs in the highest categories[12]. In addition to ensuring regular training and mobilization, the key areas in which CCPCs need strengthening include: (i) coordination with municipal authorities in contingency planning and sharing risk information; (ii) shelter management, and (iii) project management. The Project will strengthen the CCPCs' preparedness and response capacity.

9. **For CCPCs to evacuate communities efficiently during adverse hydrometeorological events, Haiti's Early Warning System (EWS) needs to be strengthened, and behavioral insights need to be incorporated into the community mobilization process.** Emergency plans and protocols of EWS at the national level need to be systematized in standard operating procedures and formally coordinated between the national, departmental and municipal levels. In addition, communities should be adequately informed of the seriousness of a predicted weather event in a way that is easy to understand, and guided as to where the shelters are located. A behavioral study conducted during project preparation, to better understand the behavioral, social, and structural barriers to the response to early warning systems[13], confirmed that evacuation orders and the use of shelters are not followed partly because of people's preferences and beliefs. Some people do not evacuate because either they do not have the logistical or financial resources, or no shelter is available in their community. Others prefer not to evacuate, because they: (i) do not trust the messenger (in this case, CCPC); (ii) underestimate the hurricane risk level; (iii) feel safer at home than in a public space that may not have proper operating norms; (iv) are concerned about shelters becoming overcrowded and lacking in basic services, and/or (v) fear losing their livestock, as the shelters have no room for animals. Shelters also have limited management and oversight during evacuation, which increases the risk of gender-based violence for women. The Project will strengthen EWS, and the safety and services management at the shelters, integrating these behavioral insights in the project interventions.

10. **The most critical gap in preparing and responding to adverse hydrometeorological events is the lack of safe and resilient "safe havens"[14] for the evacuation of populations at risk.** Shelters in the municipalities most heavily affected by Hurricane Matthew did not withstand the hurricane's winds (a significant portion of the shelters were either damaged or destroyed), while the population in Haiti's remote areas simply did not have access to any shelter[15]. When shelters/safe havens were available, they were often either too crowded or lacked basic emergency needs (food, water, first aid) and links to medical facilities. A study on shelter coverage for the population in areas highly exposed to flood and hurricane hazards in the *Grand Sud* revealed that of the 41 municipalities, 12 have barely adequate shelter coverage, 24 have inadequate coverage, and five are inadequately covered in a serious manner. The international DRM support in the past, including World Bank assistance under the ongoing Disaster Risk Management and Reconstruction Project (PRGRD), has not expanded shelters significantly due to factors such as capacity constraints at the Civil Protection Directorate (*Direction de la Protection Civile*, DPC), land availability and lack of financing. A major focus of the Project is to expand

[11] The World Bank has provided sustained support to the strengthening of CCPCs through the Emergency Recovery and Disaster Risk Management Projects (ERDMP), and the ongoing Disaster Risk Management and Reconstruction Project (PRGRD).
[12] The Civil Protection Directorate's (DPC's) mid-term evaluation of PRGRD support to CCPCs revealed a substantial improvement of CCPCs' scores, based on three main criteria: (i) length of existence of the CCPCs; (ii) organizational strength, and (iii) functional capacity. Of the 21 "Average" CCPCs, 14 are in the departments targeted by the Project.
[13] Using Behavioral Insights to Improve Disaster Risk Management in Haiti, World Bank 2018 (unpublished) Mind, Behavior, and Development Unit, GP Poverty in collaboration with GSURR.
[14] "Safe havens" refer to emergency evacuation structures that are used up to 72 hours after an adverse natural event. They are also called shelters. This type of "emergency shelters" should be differentiated from shelters that may be used to accommodate people for much more than 72 hours.
[15] Half of the CCPCs interviewed after Hurricane Matthew reported that the registered loss of life occurred mostly in remote areas which have less access to information and shelters.

the network of resilient and safe emergency shelters in high risk areas, including the provision of basic services in these shelters.

11. **The adoption of safer construction practices can significantly reduce the vulnerability of infrastructure to earthquake disasters and possible disaster damages with relatively low additional cost.** Haiti has not been able to reduce the vulnerability of its infrastructure (both public and private buildings), including residential buildings, through the application and enforcement of building regulations. Building regulations are not enforced due to the financial constraints and difficulty of attracting and retaining qualified personnel to provide advisory services to home builders, oversee construction works and enforce code provisions. The Technical Bureau for Buildings (*Bureau Technique du Bâtiment*, BTB) under the Ministry of Public Works, Transport and Communications (*Ministère des Travaux Publics, Transports et Communications*, MTPTC) has been effective in disseminating safe construction practices to both public and private sector builders[16], and the Project aims to strengthen and expand its dissemination program.

Institutional Context

12. **The Ministry of Interior and Local Authorities (*Ministère de l'Intérieur et des Collectivités Territoriales,* MICT) has the institutional mandate for Civil Protection.** The DPC under the MICT has departmental and municipal representation including 10 Departmental Civil Protection Committees (*Comités Départementaux de Protection Civile,* CDPCs), and 140 CCPCs. Due to its "lower" status as a Directorate (a non-autonomous entity), the DPC has historically been granted very limited direct operational budget. It typically relies on international funding and a broad network of local level CCPC volunteers to fulfill its critical responsibilities of preparedness and emergency response.

13. **The National Disaster Risk Management System (*Système National de Gestion des Risques et Désastres*, SNGRD), which was established to handle emergency operations and manage disaster risk, is an *ad hoc* structure operating without a legal framework.** The Permanent Secretariat of Disaster Risk Management *(Secrétariat Permanent de Gestion des Risques et des Désastres,* SPGRD) oversees overall inter-sectoral coordination. SNGRD is a multisectoral system, however the low level of representation and the limited technical capacities and budget from each sector limits its operationalization and the integration of DRM across the Government.

14. **A new Disaster Risk Management Law is currently under consideration by Parliament.** Upon its approval, this Law would elevate the DPC to an autonomous entity and formally establish the SNGRD.

World Bank Support for DRM in Haiti

15. **The Project continues the World Bank's long-term engagement in support of Haiti's DRM efforts, in the context of Fragility, Conflict and Violence (FCV), and incorporates lessons learned from previous assistance**. The World Bank has provided continuous support to Haiti's DRM sector through TA and projects, including the Emergency Bridge Reconstruction and Vulnerability Reduction Project (PROReV), and the ongoing activities of the Strengthening Hydromet Services Project (Hydromet), the Municipal Development and Urban Resilience Project (MDUR), and the Disaster Risk Financing Technical Assistance. Activities related to the strengthening of EWS under the Project would complement those currently being provided under the Hydromet Project and the ongoing PRGRD, as recurrent episodes of institutional

[16] This BTB database was established after the 2010 earthquake for affected buildings in Port-au-Prince. The evaluation revealed the high vulnerability of self-constructed housing, which led to the development of the various safe construction norms that are now being used. The BTB uses these tools as the basis for its training programs. The BTB's training are widely open where the *constructobus* reaches a wide audience, a including private actor, at the local level.

instability and civil unrest, together with severe capacity constraints, has affected the implementation of both of these ongoing projects. The ongoing cross-sectoral DRM engagement, both TA and financial and technical assistance under investment projects, has allowed for extensive stakeholder consultations with ministries at the national level, as well as with the municipal and community levels. These consultations have informed preparation of the Project, as elaborated below.

16. **The ongoing PRGRD (US$80 million including the US$20 million AF) has successfully helped to reduce the vulnerability of the transport network through rehabilitation of damaged critical transport infrastructure and risk reduction investments.** The PRGRD has also been instrumental in developing disaster preparedness and emergency response capacities for civil protection, expanding and providing efficient training to the CCPC network, and disseminating risk information for effective decision-making. The PRGRD has successfully brought all CCPCs in the country to a minimum of level 2 certification. It has also supported the development of the first national DRM open-data platform (Haitidata.org), which has provided access to LiDAR, orthophoto, satellite imagery, and a digital elevation model for the country. PRGRD is also supporting the development of the first sectoral DRM plans in the country, focused on the education and health sectors. The planned pilot emergency shelter programs have been delayed mainly because of DPC's capacity constraints related to planning and implementing infrastructure interventions, especially post-Hurricane Matthew. Due to these constraints several activities were reoriented to focus on the rehabilitation of emergency shelters. Despite delays, the PRGRD has now initiated the rehabilitation program for 12 shelters affected by Hurricane Matthew.

17. **The scope of the Project builds upon the experience of the PRGRD and other World Bank-supported DRM activities.** It integrates lessons learned, and leverages innovative approaches to improve implementation in several areas. First, it will increase provision and access to new resilient shelter infrastructure within existing public spaces, in particular school compounds, thereby also reducing the vulnerability of school infrastructure to natural hazards. Second, it will involve the beneficiary communities at the design stage, and throughout the shelter construction process to promote ownership and commitment in shelter management. Third, it will integrate innovative approaches with respect to EWS and shelter activities by addressing behavioral insights to address the social, physical and behavioral barriers to evacuation that are at the root of the high death tolls from predictable natural events. Fourth, building upon the successful training of CCPCs under the PRGRD[17], the Project will further deepen the CCPCs' evacuation, communication and shelters management capacities to better serve communities, and their integration with municipalities. It will also support the development of institutional tools to empower DPC's structures and municipalities to absorb the CCPC function through the establishment of sustainable structures outside of project financing. Fifth, the Project would put emphasis on the development and approval of standard operating procedures that are applicable at the national, department and local levels[18], including protocols for EWS to help CCPCs evacuate communities. Sixth, to address the significant delays in the implementation of shelter rehabilitations under PRGRD due to technical capacity limitations within the Project Implementation Unit (PIU), the Project will supplement its technical capacity with delegated implementation agencies. Finally, the Project would simplify the PRGRD's institutional arrangements, by limiting project implementation responsibilities to those carried out by one implementing agency only.

[17] The CCPC training curriculum includes standardized capacity building on: Preparedness and emergency management (protection of population, contingency plans, early warning, evacuation procedures, emergency communication), leadership, logistics, post-disaster damage evaluations and needs analysis, shelters management (including identification of new shelters), risk mapping, risk education and outreach. CCPC training also support the development of contingency plans for the municipalities.

[18] Hydromet focuses on improving climate information to feed into EWS, PRGRD focuses on the alert dissemination equipment and the project focuses on ensuring the existence of reliable Standard Procedures to conduct evacuation based on climate information.

C. Relevance to Higher Level Objectives

18. **Promoting shared prosperity and ending extreme poverty require the reduction of households' vulnerability to shocks that trap them in (or push them into) poverty.** Increasing the country's resilience to natural hazards is consistent with the World Bank's twin goals of eradicating extreme poverty and boosting shared prosperity. According to the 2014 Poverty Assessment, economic vulnerability is extensive in Haiti: almost 70 percent of the population is either poor or vulnerable to falling into poverty, and nearly 75 percent of all households are economically impacted by at least one shock each year, including adverse natural events. Catastrophic events disproportionally affect the poorest and marginal populations that settle in flood zones and coastal areas. Indeed, in the poorest departments (Grande Anse, Nord-Est, and Nord-Ouest), between 78 and 82 percent of the population affected by an adverse climatic shock is poor[19].

19. **The Project is aligned with Haiti's national development priorities and with the World Bank Group's Country Partnership Framework (CPF) for the Republic of Haiti for FY16-FY19.** The Project is aligned with the Government's 2010 Action Plan for National Recovery and Development of Haiti (PARDH), which outlines "preparation for the hurricane season and disaster risk management" and the Government's 2012 Strategic Development Plan (PSDH), which prioritizes the improvement of DRM. The CPF places a strong emphasis on building resilience by supporting the GoH to prepare for and prevent natural disasters and strengthen climate resilience. The Project directly contributes to the achievement of two of the CPF's objectives, Objective 8, Strengthen Natural Disaster Preparedness, and Objective 9, Improve Disaster Prevention and Strengthen Climate Resilience.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

The Project Development Objective (PDO) is to improve: (i) early warning and emergency evacuation capacity in selected municipalities in high climate risk-prone areas, and (ii) the provision of and accessibility to safe havens.

PDO Level Indicators

- Number of CCPCs with excellent competencies in emergency planning and management, in high climate risk-prone areas - Level 1 certification;
- Improved National Early Warning and Communication System for Hydromet events based on approved and adopted standard protocols;
- Increase in the number of people living in flood-risk areas who are covered by a shelter
    - Increase in the number of females living in flood-risk areas who are covered by a shelter

20. Section VI contains the complete Results Framework, including PDO-level indicators and intermediate results indicators by component, along with the corresponding baselines, intermediate, and end-of-project targets.

[19] Investing in people to fight poverty in Haiti: Reflections for evidence-based policy making, World Bank 2014.

B. Project Components

21. **The Project will finance technical assistance and infrastructure investments to improve the resilience of the Haitian population against hydro-meteorological hazards in five key departments.** The total project cost is estimated at US$35 million, of which US$10 million will be financed under National PBA, and US$25 million will be financed under Crisis Response Window (CRW). The Project will comprise four components, as described below.

Component 1: Strengthening Disaster Preparedness and Emergency Response Capacity and Promoting Building Regulation and Resilient Construction Practices (Total Cost US$8 million)

Component 1 comprises two sub-components: (i) Strengthening Disaster Preparedness, and Emergency Response Capacity, and Disaster Risk Data Management, and (ii) Promoting Building Regulations and Resilient Construction Practices at the Local Level.

Sub-Component 1.1 – Strengthening Disaster Preparedness, and Emergency Response Capacity, and Disaster Risk Data Management (Total Cost US$6.5 million)

22. **This Sub-component will strengthen the 140 CCPCs' emergency preparedness and response capacities[20], improve EWS, and strengthen the management of the CCPC and shelter networks by**, *inter alia*: (i) *building the capacity of the country's CCPCs* through the provision of behaviorally-informed standardized training program to respond to disasters with integrated emergency response plans and protocols[21]; (ii) *designing a national early warning system and communication strategy* with approved and adopted protocols adapted to local conditions; (iii) *carrying out school-based risk education technical assistance and simulation exercises targeted to children, teachers and school directors* to encourage appropriate behavior[22], and (iv) *carrying out capacity building activities and development of risk data management tools[23] for the DPC aimed at improving CCPCs' and shelter management*. All of these activities will include awareness raising on the long-term effects of climate change and the different adaptation and mitigation measures available.

Sub-Component 1.2 - Promoting Building Regulations and More Resilient Construction Practices at the Local Level (Total Cost US$1.5 million)

23. **This Sub-component will support the promotion of building regulation and resilient construction practices at the local level by,** *inter alia*: *(i) supporting BTB in providing technical training and advisory services in construction and supervision of building projects to local practitioners, and (ii) providing training and technical assistance to BTB selected*

[20] In order to maintain them to at least Level 2 certification and upgrade some of them to a Level 1 certification.
[21] The CCPC training curriculum includes: preparedness and emergency management (protection of population, contingency planning, early warning, evacuation procedures, emergency communication, and first aid), leadership, logistics, post-disaster damage evaluations and needs analysis, shelter management (including identification of new shelters), risk mapping, risk education and outreach. The CCPC training also supports the development of contingency plans for the municipalities.
[22] School-based risk education activities will be prioritized in the schools covered by the World Bank-financed Providing an Education of Quality in Haiti Project (PEQH) (P155191). These schools are being targeted by the PEQH on the curriculum strengthening side, which will facilitate piloting risk education activities.
[23] This will include support to the national risk data platform, HaitiData.org, and development and dissemination of data management tools and applications that will allow the DPC to inform, plan, prioritize, implement and monitor preparedness and response activities, including: (i) the use of interactive maps of hazards, evacuation routes, population, health facilities, and shelters, and (ii) the management and monitoring of shelter usage, capacity, and resource allocation for material and human resources needs.

staff in construction and supervision of building projects. More specifically, it will: (i) provide construction advice and training in safe construction practices to masons, homeowners, architects and engineers; (ii) disseminate guidelines and training material through the *Constructobus* program; (iii) develop a communication and outreach strategy; and (iv) raise awareness towards climate change and adaptation or mitigation measures applicable to construction works. For municipal staff, this Sub-component will provide technical assistance for: (i) construction planning; (ii) building code awareness, including promotion and enforcement; and (iii) awareness of building permits for construction, occupancy certification, and building inspection. The BTB will benefit from the shelter design and construction activities under Component 2 through training and dissemination of best practices. These activities will be complemented by a World Bank-executed TA to support the GoH in mainstreaming DRM in the education sector.

Component 2: Construction and Rehabilitation of "Safe Havens" (Total Cost US$23 million)

24. This Component will finance: (i) *the construction, reconstruction and/or rehabilitation of selected emergency shelters or "safe havens", including those in schools, community centers, markets, and roadside annexes[24], and the reinforcement of small road infrastructure acting as emergency walkways leading to safe havens,* prioritized according to the methodology described in paragraph 25 below; (ii) *the provision of improved basic services to these safe havens* (compliant with climate change mitigation approaches)[25]; (iii) *technical studies, including relevant engineering designs, technical audits, social and environmental safeguard instruments, and shelter activation and closure operating procedures for selected investments*; (iv) *training, technical assistance and communication activities aimed at achieving social mobilization and coordination of safe haven's investments among all stakeholders participating in the Project; and (v) monitoring and supervision of works.* Delegated Implementing Agencies (*Maître d'Ouvrage Délégué* – MDODs) will support communities, CCPCs and municipalities in the monitoring and supervision of works and improve communities' engagement and preparedness, as described in paragraph 26 below. They will also facilitate coordination of shelter activities with those institutions responsible for the shelters' buildings. A key criterion for the site selection of safe havens to be financed will be land availability within the shelters premises to allow for construction activities with minimal disruption of the shelters' original function and increased security of its users. Technical assistance will be engaged to design guidelines for resilient construction, rehabilitation and maintenance of safe havens, as well as training activities and materials.

25. **Methodology for prioritizing shelter investments.** Priority for safe haven investments under Component 2 will be assigned to municipalities located in the departments of Nippes, Sud, Grande Anse, Nord Ouest and Nord, given their risk profile and the vulnerability of their population. The multi-criteria methodology developed by the DPC to prioritize shelter interventions, which combines GIS data and field information, will consider: (i) flood risk[26]; (ii) accessibility (3 km radius or about a 45 minute walk); (iii) risk/service ratio; (iv) existing shelter building characteristics, such as size, land availability, and level of destruction post-Matthew; (v) the level of the CCPC's capacity; and (vi) the level of the municipality's engagement in DRM[27]. A thorough field verification and consultation with stakeholders, in particular CCPCs, mayors, and other government partners (the Ministry of National Education and Vocational Training—MENFP--in

[24] Roadside annexes, as referred in the MIT-Harvard study, can include small shelter infrastructure attached to bus stops or markets located by the side of a road

[25] While generators may be provided for emergency situations in response to a major event, solar panels will be installed preferably for the day-to-day needs of the school. As part of climate change mitigation measures, the shelters' design will promote enhanced indoor environmental quality and natural ventilation to reduce energy consumption as well as designs that optimize reliance on natural light to reduce the need for artificial lightning,

[26] A 100-year return period flood event was used as it would be associated with floods caused by a high category hurricane.

[27] Both CCPC capacity level and municipality engagement are evaluated following a defined methodology to assess level of certification each year

the case of schools), will complement this methodology to confirm the sites that will be financed under the Project. The Project will aim to construct or rehabilitate five to eight shelters in each of the five targeted Departments with an average capacity to provide safe haven to about 300 to 500 persons in each of them[28]. Field verification will be facilitated by the results of the comprehensive structural and functional assessment of existing shelters in the departments of Nippes, Grand-Anse and Sud conducted under PRGRD.

26. **Community involvement and responsibilities for shelter construction, operation, management and maintenance.** The shelter infrastructure will be coupled with a "my community, my shelter" program to improve community engagement and preparedness. The program will provide training for CCPCs, shelter management committees and the community at large. Technical assistance will support the design of protocols for the management of evacuees placed in emergency shelters, as well as the activation and closure of shelters. Community involvement campaigns, conducted by qualified MDODs that are specialized in social mobilization and knowledgeable of the Haitian context, will be launched early in project implementation and will be sustained throughout implementation. MDODs will be in charge of shelter construction and activities linked to social mobilization, information sharing, and community awareness. During emergencies, safe havens will serve as evacuation shelters, and will be managed by the DPC. Outside of an emergency situation, municipalities (or line ministries) to which the safe havens belong will remain responsible for operation and management, as well as maintenance activities.

27. **Special provisions for school shelters.** Integrating the shelter within the school complex will maximize the use of infrastructure investments with significant co-benefits, as it will provide improved education facilities for students, allow for regular maintenance of the structure, and help build ownership within the community. Operational procedures for school shelters will be developed to minimize the impact on the schools' regular activity, and protect furniture and educational materials.

Component 3: Contingent Emergency Response (CERC) (Initial Allocation: US$0 million)

28. This Component will finance the implementation of emergency works, rehabilitation, and associated assessments in the event of a natural disaster. In the event of an emergency, uncommitted funds from other components may be reallocated in accordance with an Emergency Action Plan prepared by GoH and the Contingent Emergency Response Component (CERC) implementation modalities. A dedicated chapter in the Project's Operations Manual details guidelines and instructions to trigger a qualifying emergency and the use of funds under this Component. Uncommitted funds to be allocated to this component will be determined at the time of the emergency in agreement with the World Bank.

Component 4: Project Management and Implementation Support (Total Cost US$4 million)

29. This Component will finance the costs related to overall project management and implementation support, including: (i) operating costs (including staff costs) and support for training in procurement, safeguards, monitoring and evaluation, technical and financial management; (ii) individual technical experts for project implementation, as needed;

[28] Rehabilitation and construction are two different types of interventions. More specifically, the Project will emphasize the construction of new shelter structures within existing public spaces, in particular schools. For these new structures, the design will be undertaken by an architecture and engineering firm and the construction will be managed by the MDOD. The Project will take advantage of the construction of shelters within schools to rehabilitate the remaining school buildings as needed. A special provision for rehabilitation works is foreseen in the MDOD contract. Rehabilitation works will be minimum in nature (light rehabilitation and not retrofit, and upgrade of functional aspects).

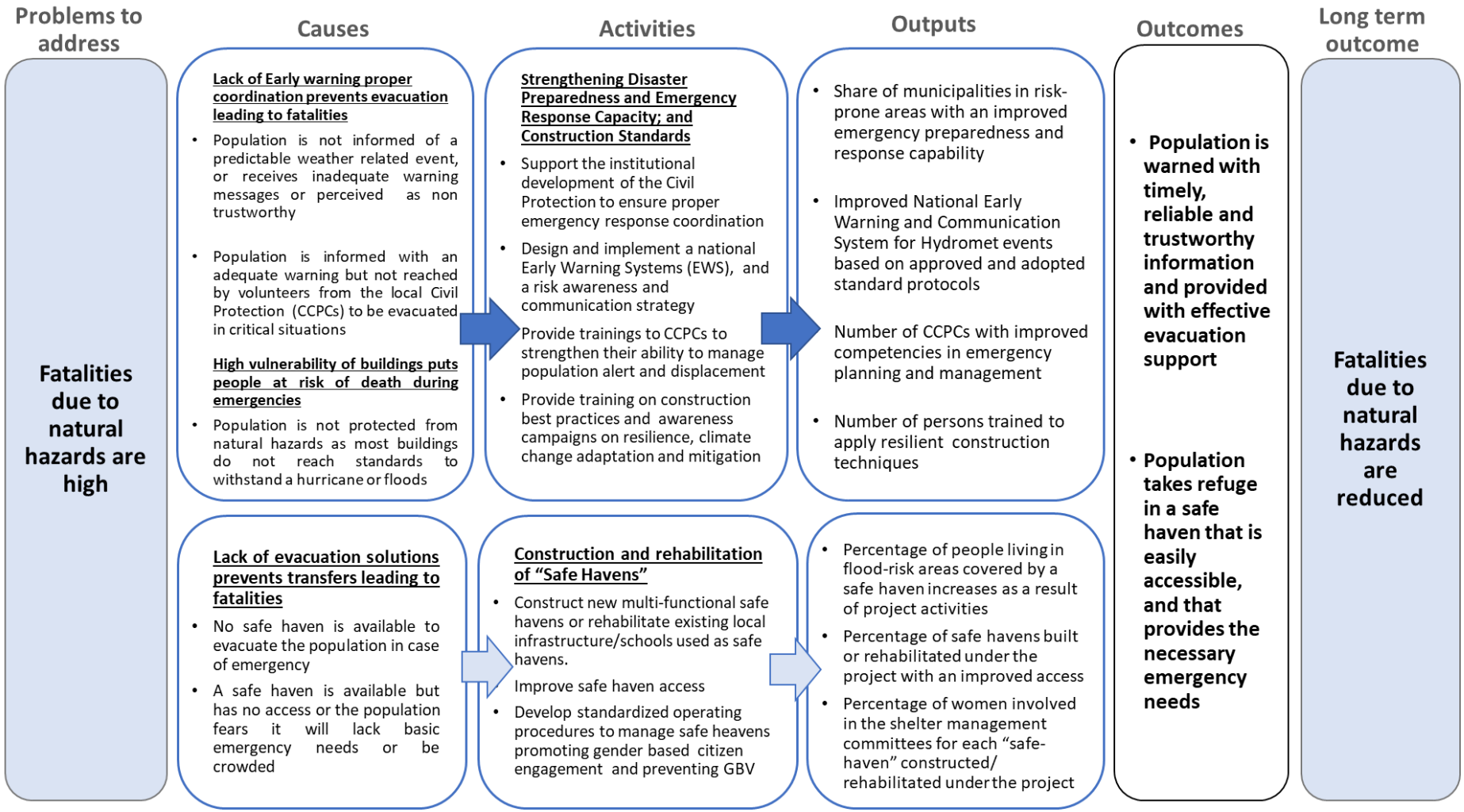
(iii) the project audit (including financial reporting); (iv) monitoring and evaluation, including the collection of socio-economic data and support for environmental and social safeguard supervision; (v) equipment (vehicles, furniture, and information and communication technology); and (vi) communication plan.

C. Project Beneficiaries

30. **Technical assistance activities with national coverage under Component 1 will benefit an estimated 10.9 million people (of whom 5.5 million are women). Shelter infrastructure investments under Component 2 will benefit an estimated 3.04 million people[29], of whom 49 percent are estimated to be women[30].** Direct beneficiaries of each safe haven investment will be determined after site selection based on the population covered by the safe haven.

[29] The 3.04 million beneficiary figure corresponds to the overall population of the five targeted departments, which will benefit from various activities, including CCPC training, construction practices dissemination and shelter provision. Direct beneficiaries from new shelter construction will range between 12,500 and 20,000 persons.
[30] IHSI official projections for 2015 for the total population of the five targeted Departments (Sud, Nippes, Grande Anse, Nord and Nord-Ouest).

D. Results Chain



E. Rationale for Bank Involvement and Role of Partners

31. With its worldwide experience in DRM, as well as long and deep engagement in DRM in Haiti, the World Bank is in a unique position to support the GoH in addressing its DRM challenges. The Project's design reflects lessons learned from World Bank experience in recent years (paragraph 34). The Project also benefits from local experience in Haiti, including a long-term partnership with the DPC and a cross-cutting dialogue with other sectors on DRM. For example, the Project has integrated engineering innovations to facilitate the economic recovery of the affected populations, such as better resilience to high wind speeds, water supply systems, separate sanitation facilities, separate spaces for women, and space for livestock.

32. All of the proposed investments are essential public services and institutional strengthening that cannot be financed directly by the private sector. The World Bank will provide adequate focus on financing structural and non-structural interventions, as well as operations and maintenance arrangements. Finally, World Bank's safeguards policies will ensure that social and environmental aspects are addressed appropriately before, during, and after implementation.

33. The Project is a part of the larger effort by Haiti's international partners in the DRM sector and ensures synergies and alignment with their interventions, namely:

(i) *Strengthening disaster risk governance at the central, departmental and local levels*[31]. The European Union's (EU) 2017 budget support program and the Haitian Program to Support State Reform (SB-II), include three indicators on DRM that are directly linked to the elevation of the DPC to a General Directorate and the overall establishment and strengthening of the SNGRD;

(ii) *Strengthening disaster preparedness, including Early Warning Systems*[32]. The EU has invested around €22.2 million since 1998 under its disaster preparedness program to strengthen shelters and infrastructure to face recurring hurricanes, floods, and other natural hazards. Since 2011, the Office of U.S. Foreign Disaster Assistance (OFDA)/United States Agency for International Development (USAID) has supported the International Organization for Migration (IOM) to pre-position emergency relief supplies in preparation for disasters during the rainy and hurricane seasons, as well as to develop the capacity of the GoH's personnel to manage facilities and deploy emergency supplies. The Inter-American Development Bank (IDB) has invested more specifically in EWS;

(iii) *Disaster risk reduction*[33]. Since 2018, the European Commission's humanitarian aid (EU-ECHO) has invested about €10 million to consolidate disaster risk reduction investments, including: rapid response capacities, disaster-resistant shelter techniques, shelter needs, and coordination across humanitarian operations; and

(iv) *Reinforcing disaster recovery mechanisms*[34] *and Urban Resilience*. USAID-OFDA and the World Bank are investing in urban resilience in the Port-au-Prince and Cap-Haitian areas, respectively.

[31] WB, UNDP, AECID, USAID, Swiss Cooperation
[32] WB, EU, IDB, ECHO, USAID-OFDA with IOM, Swiss Cooperation, Canadian Aid and WFP
[33] WB, EU-Echo, USAID-OFDA, UNDP
[34] Canadian Aid, UNDP

F. Lessons Learned and Reflected in the Project Design

34. The Project builds on the World Bank's global experience in DRM technical assistance and projects, in particular in India and Bangladesh, countries that have successful experiences and have achieved extraordinary reductions in fatalities from extreme weather events.

35. **Strengthening DRM at the local level and engagement of the community in DRM are effective strategies to reduce disaster related fatalities.** Project design has integrated lessons learned from the past World Bank support to Haiti that emphasized the importance of community-driven development. Additionally, evidence from Bangladesh and India demonstrates the important benefits of involving local communities in infrastructure location and design to ensure better safety, sanitation and functionality of the shelters, while also keeping in mind the interests of women and vulnerable groups, as well as universal access issues. The IDB-financed National Early Warning Project (PNAP) revealed the need to involve the communities and CCPCs for the successful development and implementation of local early warning interventions. Various post-earthquake reconstruction projects financed by the World Bank have also demonstrated the importance of capacity building and dissemination of best construction practices at the local and community levels in improving the understanding of the building code and its application.

36. **Lessons from the World Bank's experience worldwide in the design and management of shelters have been reflected in the Project's design to optimize the shelters' structural and functional aspects.** In a cyclone scenario with high speed winds and torrential rain, shelter design in India and Bangladesh has evolved to an inward-looking building that can be better insulated from the winds and rain. These experiences have also shown the importance of involving shelter management committees, and the institution to which the shelter belongs (e.g., the MENFP in the case of schools used as shelters) for effective shelter management and operation and maintenance. Involvement of these institutions from the inception stage, including the use of collaboratively generated Standard Operating Procedures (SOPs) in the management of the shelter during an evacuation event, plays an important role in the success of such projects.

37. **Weak implementation capacity can be strengthened by using Delegated Implementing Agencies (*Maître d'Ouvrage Délégué* – MDOD) for infrastructure projects.** Various post-earthquake reconstruction projects financed by the World Bank have successfully utilized MDODs for the implementation of infrastructure sub-projects. This implementation approach, which combines oversight through a government agency with on the ground implementation by MDODs, combined with community outreach efforts during implementation has proven to be a realistic and effective way of delivering results in a challenging environment.[35] MDODs have been successful in filling the technical capacity gaps of Government implementing agencies.

38. **It is important to apply behavioral insights to support the design of better DRM interventions.** Governments around the world are leveraging behavioral science to develop cost-effective policy tools that better reflect the complexities of human decision-making to change behavior. Studies have found that giving information to (or educating) the community does not necessarily lead to better disaster and emergency preparedness. How the risk is interpreted by individuals could determine the process and the level of disaster and emergency preparedness. The majority of studies show that people are more likely to evacuate when they have a good understanding of the severity of the storm, including its intensity, potential damage, location and timing of landfall, and rapidity of onset. Rules of thumb to help determine their personal risk, which is highly predictive of evacuation behavior, include: (i) whether neighbors are evacuating; and (ii) if businesses in the community are closing. While not a consistent predictor of evacuation, gender and children in the

[35] See IEG upcoming Project Performance Assessment Report of the PREKAD -February 2019.

household may be important factors in decision making in the Haiti context. Some studies found that women with children are more likely to evacuate.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

39. The Project will be implemented using the institutional framework, procurement, financial management and disbursement arrangements in place under PRGRD and other World Bank-financed projects. However, implementation arrangements will be simplified. The MICT, the sole ministry with responsibility for project implementation, will be in charge of the Project's technical, fiduciary and safeguards aspects[36]. All project activities will be implemented by the Projects Coordination Unit (*Unité de Coordination de Projets*, UCP/MICT) under MICT's DPC. Inter-agency working arrangements will be agreed at the beginning of the Project and will follow existing government guidelines.

40. UCP/MICT will be strengthened by: (i) the establishment of a Technical Unit specifically dedicated to the engineering and technical aspects of the Project's Component 2; and (ii) the hiring of additional technical, operational and supervision staff, to acquire technical know-how in managing infrastructure construction and rehabilitation, fiduciary and safeguards, as well as coordinating multi-sectoral engagements[37]. Drawing lessons from PRGRD, the capacity of UCP/MICT will be further amplified by contracting MDODs - such as NGOs or international organizations - to whom it will delegate responsibility for day-to-day project management for the rehabilitation/construction of safe havens. A small number of MDODs will be used, as no single MDOD has sufficient human and financial resources to manage all of the Project's shelter activities. The Project will utilize the on-going PRGRD project to advance the contracting of firms to frontload preparation of infrastructure investments.

41. The MDODs in charge of the implementation of Component 2 will be specifically qualified in the procurement of consulting services related to architectural and engineering, as well as the procurement of contracts for works under World Bank Guidelines. The MDODs will include an appropriate number of engineers and experienced construction technicians to ensure the effective management of multiple sub-projects, and to enforce the contractual commitments of consultants and contractors. Specific provisions will be included in the MDODs' contracts to ensure compliance with the World Bank's requirements on procurement, financial management, safeguards, and anti-corruption policies. The MDODs will be selected based on the eligibility criteria and selection process agreed with the World Bank, which are described in detail in the Project Operations Manual.

B. Results Monitoring and Evaluation Arrangements

42. The UCP/MICT will count upon dedicated monitoring and evaluation (M&E) staff that will monitor project progress through a dedicated M&E system based on information from the MDODs. The GoH will prepare bi-annual progress reports in accordance with the format outlined in the Project Operations Manual. Progress reports will include information on PDO-level results indicators and intermediate outcome indicators, disbursements, financial management

[36] Under the PRGRD the management of transport infrastructure rehabilitation is handled by the *Unité de Coordination de Projet* of the Ministry of Transport.

[37] The Unité Centrale d'Exécution (UCE) of the Ministry of Public Works, Transport and Communication has the right technical resources and possesses the engineering knowledge that is required for such activities. The establishment of a Technical unit at UCP/MICT draws lesson for the weakness of the UCP/MICT in undertaking this technical role under the Project.

(including project financial reports and audits), procurement, social and environmental safeguards, updated annual plan of works and activities, and specific assessments of the impact of women's participation in project design and implementation as well as the Grievance Redress Mechanism (GRM). Surveys will be carried out before, during (at midpoint) and immediately after conclusion of the safe haven works. A baseline for indicators will be established at the beginning of implementation. A Mid-Term Review (MTR) will be conducted no later than three years after the first disbursement. A final independent evaluation will be also conducted upon project completion to assess its overall achievements. A beneficiary survey will be conducted at the beginning of implementation and upon completion, and third-party technical audits will be conducted for quality assurance during the construction of shelters.

C. Sustainability

43. **CCPC capacity building.** Sustainability of the CCPCs is of concern, given the DPC's limited budget for emergency preparedness and response, and the absence of a legal framework for CCPCs. While there is limited financial commitment for a larger budget for DPC, there is a strong political will to strengthen and maintain the CCPCs. The GoH's efforts will continue to focus on: (i) supporting DPC at the national level in developing tools for sustainable management of the CCPC network, including planning and strategic tools for the provision of dedicated budgets for CCPC training over the long term; (ii) supporting municipalities in assigning human resources and funding to DRM functions; and (iii) officially integrating CCPCs in municipalities' organization and operations. These have already been successfully demonstrated in the Municipality of Cap-Haitien.

44. **Shelter infrastructure.** Lessons learned from other shelter programs have been incorporated in the Project's design with a view to improve the sustainability of investments. Previous experiences have demonstrated that when shelters are built in schools, the buildings are in continuous use throughout the year, and upkeep and maintenance is improved because of the buildings' dual purpose. After construction, DPC will turn the building over to its owner (the MENFP in the case of schools or municipalities in case of community centers or annexes of public markets) for continued operation and maintenance. DPC will include a shelter maintenance plan for the buildings' use during emergencies. At the municipal level, CCPC will work with the respective municipality and the community to help with painting, small repairs and other minor maintenance.

45. **Construction quality.** The sustainability of infrastructure is closely related to the quality of works. The Project will aim to improve the quality of construction through the introduction of: (i) community monitoring systems for improved transparency and accountability during construction, and (ii) international best practices in safe haven designs.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic, and Financial Analysis

46. **Strengthening of CCPC and DRM capacities at the local level.** Capacity building of CCPCs is based on the experiences of ERDMP and PRGRD (which have developed the training modules) and the use of standard procedures for the creation and activation of CCPCs, as well as standardized roles and responsibilities of CCPCs across the country. Training modules have benefited from regular evaluations and updates. CCPC performance will be evaluated at the beginning and end of each training, based on a multicriteria methodology that encompasses emergency preparedness and response functions, planning aspects, risk understanding and disaster risk reduction. An external evaluation of the CCPC training program, to be conducted under the PRGRD, will directly inform the Project's results indicators.

47. **Safe construction practices.** Technical assistance to the MTPTC under the Project is a continuation of World Bank support after the 2010 earthquake, which included: (i) the training of engineers to conduct the post-earthquake structural assessment of about 450,000 buildings; (ii) the training of up to 15,000 masons on construction best practice; and (iii) the establishment of the BTB to strengthen the country's administrative and operational framework for safer buildings. The Project will address the capacity strengthening of BTB, based on its comprehensive multi-year work plan and budget, and will adopt a learning-by-doing training approach to allow the BTB to be directly linked to the safe haven component activities.

48. **Safe haven investments.** This project activity stems from a technical and institutional dialogue between the GoH and the World Bank initiated in 2013 with the "Risk Ecology: Haiti Evacuation Systems Initiative" study, conducted by MIT/Harvard/Leibniz University in partnership with the UCP/MICT. This study highlights the merits of the use of schools (rural, public, vocational school, etc.,) or annexes to school buildings in a shelter strategy, and also recommends the use of community centers, roadside annexes and market annexes as possible shelter options. It has provided the technical basis for shelter activities under PRGRD, including the development of multi-functional shelter plans for various shelter scenarios and the rehabilitation of schools/shelters damaged after Hurricane Matthew.

49. **Technical specifications for infrastructure design and procedures.** The design of shelters will be based on international building codes in order to ensure that the structures are safe and resilient to hurricane and earthquake shocks. They will also consider the requirements and existing designs of the ministries responsible for the shelters. Haiti-specific Standard Operating Procedures (SOPs) will be developed based on existing SOPs and will integrate best practices from multilateral agencies.

50. **Climate co-benefits.** Investments and institutional strengthening activities are aimed at building resilience to disasters, thus enhancing the capacity of the project-supported municipalities and departments to adapt to climate change. The Project's interventions will bring significant benefits for the Government, communities and population by adapting to the consequences of climate change, especially the increased frequency and intensity of hydro-meteorological disasters. Activities under Component 1 integrate climate change into disaster plans and preparedness, and enhance construction practices to make buildings more resilient. Component 2 provides critical infrastructure for the population to cope with the increased frequency and severity of extreme events due to climate change. Climate change mitigation measures will be applied through a shift to solar energy to the extent possible, in place of generator-produced electricity. Shelter design will make the most of natural light to lower the needs for artificial lighting, promote enhanced indoor environmental quality through natural ventilation to reduce energy consumption, and make provision for ventilation and thermal comfort even when external power is not available. Shelter design will also incorporate rain water harvesting where possible. Furthermore, technical training provided to municipal staff in construction and supervision will include a module on raising awareness of climate change, and related mitigation measures.

51. **Citizen engagement and community consultation prior to safe haven investments.** The Project will carry out a validation of the proposed sites through extensive consultations with different stakeholders from institutions that own the shelters, municipalities, CCPCs, and other members of the community. These consultations will also clarify the role of CCPCs and shelter management committees (CCPC subgroup) in the management safe havens (site validation, monitoring of construction, involvement in maintenance, establishment of the clear linkages of safe havens to municipal contingency plans, etc.). A first consultation with CCPCs in the *Grand Sud* in November 2018 collected preliminary feedback from CCPCs on the safe haven construction and rehabilitation approach proposed by the Project, including the overall site selection criteria and the possible types of safe havens. It provided important recommendations to efficiently link CCPCs to safe haven investments.

52. **The Project's primary benefits from better disaster preparedness and improved response systems are the expected reduction in loss of life and the indirect associated burden of disease (water and vector-borne diseases), reduction in socio-economic activities, and reduced damage and losses from disasters**. Economic literature suggests that DRM benefits exceed investments[38], based on three types of benefits: (i) avoided asset losses due to natural disasters; (ii) saved lives per year, considering the value of statistical life (reduced risk of premature death) and avoided injuries; and (iii) additional economic benefits. The Project's economic analysis is based only on saved lives per year and reduced economic activities, as it is difficult to assess the reduction in future asset losses as a result of the introduction of weather-proof construction standards.

53. **The economic analysis covers investments in safe-havens and shelters.** A cost benefit analysis was carried out for the Project's proposed shelter investments. The results indicate a net present value (NPV) of US$32.7 million at a 6 percent discount rate over 25 years, an economic rate of return (ERR) of 14 percent and a benefit/cost ratio greater than one.

54. A sensitivity analysis was carried out to determine the switching points for cost increments, benefit decrements, and equal cost increments and benefit decrements with discount rates ranging from 4 percent to 8 percent. The switching point when cost increments equal benefit decrements, discounted at 6 percent, is ±37 percent. The results are more sensitive to a decrease in benefits than to an increase in costs.

55. A scenario analysis was also carried out and the results are illustrated in Table 2: the base case scenario is discounted at 6 percent and relies on the estimates of costs and benefits; the pessimistic scenario is discounted at 8 percent and includes a 10 percent increase in economic costs and a 10 percent decrease in benefits; and the optimistic scenario is discounted at 4 percent and includes a reduction in economic costs by 10 percent and increase of benefits by 10 percent. The NPV is positive under all three scenarios and the ERR is 12 percent even in the pessimistic case. As such, the project investments in shelters are robust. Details of the economic analysis are available in the Project File.

Table 2: Results of the Economic Analysis

Key economic Indicators	**Project**		
	25 years discounted at:		
Scenario	4% Optimistic	6% Base Case	8% Pessimistic
Cost/Benefit Analysis			
NPV (US$ million)	*64.0*	**32.7**	*12.6*
ERR (%)	*17*	**14**	*12*
PV benefit/cost ratio	*3.3*	**2.2**	*1.5*
Switching point			
>cost = <benefit (±%)	*±53*	**±37**	*±18*
>cost (±%)	*+231*	**+120**	*+47*
<benefit (±%)	*-69*	**-54**	*-31*

[38] Hallegatte, Stephane. 2012. A cost effective solution to reduce disaster losses in developing countries: hydro-meteorological services, early warning, and evacuation. Policy Research Working Paper No. WPS 6058. Washington, DC: World Bank. *http://documents.worldbank.org/curated/en/190261468181486694/A-cost-effective-solution-to-reduce-disaster-losses-in-developing-countries-hydro-meteorological-services-early-warning-and-evacuation*

B. Fiduciary

(i) Financial Management

56. The Project's Financial Management (FM) function will be carried out by an existing coordination unit, UCP/MICT, under the DPC within the MICT, which currently carries out this function for other World Bank-financed projects. The UCP/MICT structure will be strengthened in order to ensure an adequate and sufficient FM, especially since extensive FM support will be needed to strengthen administrative capacity, mainly in the areas of project financial information control, budget planning, and execution monitoring. As project activities will be implemented at national and local municipal levels, effective coordination mechanisms between DPC and its local entities (CCPCs) will be put in place to ensure that project activities and investments are successfully implemented, managed and maintained. As part of the Project's institutional arrangements, adequate coordination mechanisms will also be established to ensure coordination among MICT and other participating government entities. Detailed FM arrangements (staffing, budgeting, internal controls, funds flow, accounting and financial reporting and external audit) have been included in the Project Operations Manual, which also includes specific provisions for the allocation of project funds for the contingent emergency response component.

(ii) Procurement

57. Procurement will be carried out in accordance with the Procurement Regulations. The World Bank's Systematic Tracking of Exchanges in Procurement (STEP) system will be used to prepare, clear, and update the Procurement Plans and conduct procurement transactions for the Project. The textual part, along with the Procurement Plan tables in STEP, constitute the Project's Procurement Plan.

58. The World Bank's standard procurement documents will be used for all contracts that are subject to international competitive procurement. When approaching the national market, the GoH's procurement procedures may be used in accordance with the National Procurement Arrangements (paragraph 5.3) of the Procurement Regulations. This will be specified in the Procurement Plan tables in STEP. When the GoH uses its own national open competitive procurement arrangements, as set forth in the 2009 Law laying down general rules relating to Public Contracts and Public Service Concession Agreements, such arrangements will be subject to paragraph 5.4 of the Procurement Regulations and the conditions included in the Grant Agreement. When national procurement arrangements other than national open competitive procurement arrangements are applied by the GoH, such arrangements will be subject to paragraph 5.5 of the Procurement Regulations.

59. A procurement capacity assessment of the UCP/MICT has been conducted and a Project Procurement Strategy for Development (PPSD) has been developed. The assessment and PPSD revealed that the UCP/MICT has strong experience in the World Bank and GoH procedures for implementing World Bank-financed projects. The unit has a clear manual in place that will be amended and used for the Project. To manage the additional workload, UCP/MICT will be reinforced by one additional Procurement Specialist with relevant experience, particularly in World Bank or IDB procurement rules and procedures. The Procurement Specialist will receive training on the World Bank Procurement Regulations. Thresholds for procurement methods and prior review are provided in Annex 1.

C. Safeguards

(i) Environmental Safeguards

60. The Project is rated environmental risk Category B, per World Bank OP/BP 4.01 Environmental Assessment, since the proposed activities are expected to focus on small- to medium-scale new shelter construction and rehabilitation of existing infrastructure. Potential impacts are expected to be limited, few, site-specific, and are expected to be reversible. Mitigation measures can be easily designed and implemented. No long-term or irreversible negative environmental impacts are expected under the Project. Four safeguard policies are triggered: (i) Environmental Assessment (OP/BP 4.01); (ii) Pest Management (PO/BP 4.09); (iii) Involuntary Resettlement (OP/BP 4.12); and (iv) Physical Cultural Resources (OP/BP 4.11) to cover chance finds of cultural property.

61. Project benefits are expected to accrue to local communities in terms of: (i) access to adequate shelter facilities and improvement in the overall quality of life of disaster victims while in the shelters; (ii) the number of human lives that will be saved and increased educational and social benefits; (iii) the application of best industry practice in the design and construction of shelters for communities affected by natural disasters; (iv) shelter adaptation and resilience to the effects of climate change; (v) donor partnership in DRM efforts in the country; and (vi) the consideration and promotion of human rights and the mainstreaming of gender in the design, construction and operation of shelters. However, investments in DRM infrastructure can at times have adverse impacts on the biophysical and socioeconomic environments, if proper risk mitigation measures are not in place. Such adverse impacts include: pollution of ground and surface waterways; air and noise pollution; land acquisition, loss of livelihood and economic activities for project affected people; and impacts on cultural and historical resources. There are also potential health and safety risks associated with construction activities for workers, students, and faculty and school administration personnel.

62. Since the sites, designs and the scale of the various shelter construction/rehabilitation sub-projects envisaged under the Project will be known only during implementation, the GoH has prepared an Environmental and Social Management Framework (ESMF) and a Resettlement Policy Framework (RPF), following a broad-based and in-depth consultation approach that included interviews with relevant project stakeholder groups. Two consultations were conducted in-country on December 17 and 20, 2018, as part of the preparation of the ESMF and RPF. The ESMF and the RPF have been disclosed on the MICT and National Center for Geospatial Information (*Centre National de l' Information Géospatiale*, CNIGS) websites on January 18, 2019 and on the Association's website on January 23, 2019[39]. The ESMF provides guidance for implementing mitigation measures commensurate with the identified potential impacts/risks. It also describes the various entities involved in implementing those measures, with clear roles and responsibilities, along with a capacity strengthening program for effective implementation and monitoring. In addition, the ESMF provides an estimate of the required cost outlays and a timetable for preventing and mitigating potential negative impacts, as well as a dedicated section on the ways and means to ensure security, safety and health of school-children when construction works are conducted on school sites. The ESMF provides steps for screening all sub-projects, outlines procedures for preparing, reviewing, clearing, disclosing and monitoring sub-project- specific Environmental and Social Management Plans (ESMPs), as needed. No civil works will commence without proper compliance with the above procedures. The ESMF includes a discussion of the reason for triggering OP/BP 4.09, its potential impacts/risks and mitigation measures, and concludes that the preparation of a standalone Pest Management Plan (PMP) is not required. Since insects may or may not be present in every construction site, pest management considerations will be included in the ESMP of each individual sub-project.

[39] http://www.haitidata.org/documents/?limit=100&offset=0; http://www.mict.gouv.ht/category/publication/etudesetrealisations; http://documents.worldbank.org/curated/en/463321548405008346/pdf/Rapport-final-du-CPR-du-PGRAC-10janvier-2019.pdf; http://documents.worldbank.org/curated/en/961531548402033773/pdf/Rapport-final-du-CGES-du-PGRAC-10-janvier-2019.pdf

63. Non-governmental organizations, the MDODs, will be responsible for coordination and implementation of the Project's environmental and social safeguards. Oversight and compliance monitoring will be carried out by the UCP/MICT, which will recruit an environmental safeguard specialist and a social safeguard specialist. Together, these safeguard specialists will be responsible for ensuring that due diligence is exercised at all times in compliance with the relevant national and World Bank policies and procedures. World Bank supervision teams will include an environmental specialist and a social safeguard specialist. Monitoring reports on implementation of environmental and social safeguards provisions will be provided to the World Bank and other relevant entities for review and verification during project supervision missions.

(ii) Social Safeguards

64. Works financed under the Project are envisioned to be mostly focused on the construction of new structures on the premises of existing public buildings and the repair of existing structures (such as schools and community centers) or expansions to these structures to be used as shelters in the event of disasters. The Project will also finance small access roads to these structures to be used as shelters. Potential resettlement, minor land acquisition and loss of economic assets because of rehabilitation and construction may occur on a limited basis. Where a small number of individuals and/or families are likely to be impacted, abbreviated resettlement plans will be prepared and implemented prior to construction. The Project will avoid (or minimize and mitigate) these impacts to the extent possible. The selection of sites to be rehabilitated as shelters will only commence after the Grant is effective. For these reasons, while OP 4.12 has been triggered, the Project will follow a framework approach. As indicated above, the RPF has been prepared, consulted, and publicly disclosed. Site-specific Resettlement Action Plans (RAPs) will be prepared, if needed, once the sites are determined. No works will commence prior to the preparation and implementation of appropriate safeguard instruments.

65. Land acquisition and impacts on livelihoods will be screened upfront using a joint environmental and social screening form. The Project will avoid or minimize land acquisition as much as possible. A potential risk (as observed in other projects in Haiti) is the delay in completing land acquisition and compensation due to the complicated national procedures. The UCP/MICT´s safeguards team, as well as the MDODs that will be contracted to support project implementation (including safeguards), will be involved from an early stage in site selection and engineering/design studies, and will interact with communities during the implementation of works.

66. Risks to the communities as a result of contracting non-local labor for construction works are rated low. Most labor for construction and rehabilitation works is expected to be local, and only a few high skilled/technical workers will be required from outside. The Project will incorporate various measures to mitigate the potential negative impacts of labor influx, as well as to enhance community health and safety, by requiring that ESMPs include: (i) labor influx management, worker safety, and community health and safety measures; and (ii) clauses requiring the presence of social and environmental specialists on site during implementation. The Project will also enforce codes of conduct, and ensure that labor related commitments are reflected in the contract bidding documents.

67. UCP/MICT has limited experience in planning and implementing safeguards activities in compliance with World Bank safeguard policies. To ensure sound implementation (including M&E reporting), further training will be provided to UCP/MICT staff as needed in relation to: (i) labor and health and safety issues; (ii) codes of conduct, including those addressing and preventing gender-based violence; (iii) gender-specific interventions; and (iv) the climate change aspects of the Project. A framework or protocol will be developed for construction management practices in and around school facilities.

68. **Citizen Engagement.** The Project will leverage the lessons learned from the PREKAD and PRODEPUR projects, which were successful in strengthening participation, partnerships and transparency between citizens and local authorities through community involvement and social accountability at the local level. As demonstrated by previous community-driven experiences in Haiti, broad-based participation also contributes to creating local ownership, which, coupled with capacity building activities, ensures the sustainability of investments. To ensure the engagement of citizens, the Project will: (i) develop a pro-active communication strategy that will explain the Project's benefits to beneficiaries and the public at large; (ii) develop robust information request and grievance redress measures for project activities as a whole; and (iii) support the engagement of project beneficiaries, including CCPCs, community leaders and community associations active in the municipality, as well as representatives of municipal authorities, in the preparation, implementation and monitoring of all project activities. To reflect this approach, the Project will include a citizen engagement indicator in the Results Framework.

69. In addition, the Project will identify champions among municipalities that demonstrate strong citizen engagement in risk management and that actively contribute to the institutionalization of the DPC. These role-model examples will be promoted throughout the network of municipalities to disseminate good practices in community involvement and collaboration with local authorities, and to conduct risk mitigation actions.

70. **Gender.** According to the World Bank Group's Systematic Country Diagnostic (SCD) for Haiti[40], Haiti faces several challenges regarding gender equality. Women and girls are particularly vulnerable during the occurrence of a disaster, suffer disruptions to housing, and lack access to services and relief.[41] Women and girls are also at far greater risk of experiencing physical and sexual violence in emergency settings. In 2010, unsafe living conditions after the earthquake in Haiti contributed to sexual violence against women and girls (VAWG) in camps.[42] A gender study on early warning systems conducted by the World Meteorological Organization (WMO) in the Caribbean[43] revealed that for most households headed by females, the post-disaster recovery process was likely to be prolonged. The study also demonstrated that women's involvement at all stages of Early Warning was critical to help women and vulnerable groups to protect themselves and react appropriately during an emergency.

71. Based on the gender gap analysis conducted, the Project will specifically address the fourth pillar of the World Bank's gender strategy: "Enhancing women's voice and agency". A review of the DPC's official shelter management guide and field interviews conducted with CCPCs and communities indicates the importance of a strong focus on gender-based violence risks and corresponding mitigation measures to ensure the safety of women and girls in emergency situations. Women's focus group interviews conducted during project preparation indicated that women felt unsafe in shelter settings due to the lack of enforcement of rules. As shelters do not have separate areas for women, women lack privacy and are at risk of sexual aggression. Women would be reticent to evacuate, since shelters do not provide basic resources such as food, water, and first aid supplies. In particular, they do not offer supplies for women, such as feminine products or formula for infants[44].

[40] Haiti: Towards A New Narrative Systematic Country Diagnostic, The World Bank, 2015

[41] Violence Against Women and Girls Resource Guide, Disaster Risk Management Brief, Global Women's Institute, IDB and WBG, 2015.

[42] State of World Population, UNFPA, 2012

[43] Review of the EWS in the Caribbean, WMO, CREWS, GFDRR, The World Bank, UNISDR, 2018, unpublished

[44] Using Behavioral Insights to Improve Disaster Risk Management in Haiti, World Bank 2018 (unpublished) Mind, Behavior, and Development Unit, GP Poverty in collaboration with GSURR

72. The Project will therefore carry out the following specific actions to address the identified gender gaps:

- Shelter designs will meet international standards that consider women's and girls' physical safety and needs, such as separate toilets, toilets with wheel-chair access, ramps for easy access, medical rooms, and dedicated storage space for the assets of women merchants, etc.; [45]
- Each shelter built/rehabilitated by the Project will have its own operating procedures for activation and closure to ensure safety, including for women. Each shelter will be managed by a dedicated shelter management committee, which is a subset of the CCPC and comprises community members. The Project will encourage: (i) at least 50 percent women's involvement in the shelter management committees, where women participation is generally low; and (ii) at least 50 percent women's leadership in shelter management committees. This will be achieved through dedicated awareness raising activities at the community level;
- The Project will include women in consultations as much as possible to ensure that participatory activities and consultative processes are held in venues and formats that are suitable and possible for women to attend;
- Female workers will be included in construction works, and will be assigned food distribution, registration, and other service responsibilities during emergency situations;
- EWS messaging will include targeting of vulnerable groups, such as single female headed households, elderly households, the chronically ill, and the differently abled;
- The Project will adopt the recommendations of the Global GBV Task Force Report by: (i) requiring contractors to have sexual harassment policies and Codes of Conducts for workers; (ii) developing Sexual Exploitation and Abuse (SEA) awareness by building the capacity of project agencies, contractors and supervision consultants to prevent, respond to, and monitor SEA, and (iii) enhancing the gender roadmap in collaboration with local authorities and communities, including with women's and community organizations, and
- The Project will work with the Government and key stakeholders, including community-based organizations and women in the local community, to prevent violence against women and girls and carry out community educational programs on how to be prepared for disasters, with an emphasis on the right to a life free of violence before, during, and after disasters, and on the negative effects violence can have on the entire populations' recovery.

73. Progress towards women's empowerment in the context of a disaster will be monitored in the Results Framework through four indicators. For each shelter constructed/ rehabilitated by the Project, the Results Framework will monitor the percentage of women involved in the shelter management committees, as well as the percentage of women designated as the committee focal point to assess their level of involvement in the decision-making process. Strengthening female representation in the design and implementation of shelter operating procedures will contribute to improving the safety of women and girls during emergency evacuations. The Project will also monitor that shelter coverage is equally improved for women and men, and that shelters built or rehabilitated through the Project benefit from gender friendly infrastructure designs.

74. **Grievance Redress.** A Grievance Redress Mechanism (GRM) will be put in place to allow beneficiaries to submit complaints and ensure timely feedback and resolution. The scope of the GRM will go beyond safeguards matters and include issues such as safety, contractor performance, and potential violations of the code of conduct (which will include clauses on violence and harassment). The GRM of the Urban Resilience and Municipal Development (MDUR) Project will be taken as a reference. The GRM system will rely on local level GRM focal points, the Administrative Council of the

[45] Including children, elderly and the disabled, within the community

Communal Section (*Conseil d'Administration de la Section Communale,* CASEC) to uptake complaints, complemented by consultations, documentation and monitoring led by the Project's Social Specialist in the UCP/MICT and MDODs. The GRM will: (i) place emphasis on communications and on closing the feedback loop among the project team, contractors and project beneficiaries; (ii) require that all contractors assign community focal points for addressing grievances; and (iii) ensure frequent reporting and monitoring by UCP/MICT on grievances received and steps for their resolution. The Results Framework will track the resolution of grievances throughout project implementation.

(iii) Grievance Redress Mechanisms

75. Communities and individuals who believe that they are adversely affected by a World Bank-supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit *http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service*. For information on how to submit complaints to the World Bank Inspection Panel, please visit *www.inspectionpanel.org*.

V. KEY RISKS

76. The overall risk of the Project is Substantial.

77. **Political and Governance risk is rated High.** Political uncertainty and potential instability are the main risks in Haiti. The country experienced particularly serious social unrest in mid-February 2019, which paralyzed economic activity in the country. At the project level, these factors have the potential to create bottlenecks and delays in implementation. Political and Governance risk will be partially mitigated through dialogue and close collaboration with government entities, as well as proactive engagement by the World Bank as issues arise. The task team will provide close implementation support and adjust interventions as needed to minimize potential disruptions to the Project.

78. **Macroeconomic risk is rated Substantial**. Despite modest growth in 2018, Haiti's fiscal deficit increased significantly, putting pressure on the exchange rate and inflation. There is a risk that the fiscal position will continue to deteriorate in 2019, and may jeopardize the sustainability of certain publicly-financed programs. This risk will be partially mitigated by prioritizing intervention in existing public sites.

79. **Sector Strategies and Policies risk is rated Substantial**. As indicated earlier, the DPC and the SNGRD are not yet covered by the legal framework and are not provided sufficient dedicated budgets. A new National DRM Law has been re-drafted, but has not yet been approved by Parliament. The Project will mitigate this risk by engaging in active policy dialogue at the ministerial level and embed high-level TA support to the DPC to develop tools for strengthening sector strategies, in particular the DRM Law and the creation of an autonomous DPC with its own dedicated budget.

80. **Institutional Capacity for Implementation and Sustainability risk is rated Substantial.** Haiti is characterized by weak institutional and technical capacity to coordinate and implement integrated and multi-sectorial projects. This

includes inadequate coordination, weak quality control, and lack of information-sharing mechanisms across various agencies and levels (national and municipal). To mitigate these risks, the Project will provide technical assistance to strengthen the operational capacity of the UCP/MICT for project design, prioritization, management, and supervision. It will also contract MDODs to complement the UCP's capacity.

81. **Fiduciary risk is rated High.** The key risks for FM and procurement are both rated High and are linked to capacity constraints. The Project's FM and procurement function will be carried out by an existing coordination unit UCP/MICT under the DPC within the MICT, which currently carries out this function for other IDA-financed projects (PRGRD – P126346, and MDUR P155201). FM risks and compliance will be monitored closely during the World Bank's implementation support missions as well as through annual external audits. Experienced staff will be recruited to support the UCP's procurement and financial units and their capacity will be strengthened through TA and World Bank implementation support. Special attention will be on ensuring proper control of financial information and cash flow to MDODs, as well as MDODs' contract management.

82. **Social and Environmental risks are rated Substantial.** The Substantial risk rating is due to: (i) the UCP's limited experience in managing the implementation of safeguards; and (ii) potential health and safety risks involving children, where schools are selected for rehabilitation works. To mitigate these risks, further training will be provided to the UCP/MICT staff, as needed, on: (i) labor and health and safety issues; (ii) codes of conduct, including on addressing/ preventing gender-based violence; (iii) gender-specific interventions; and (iv) the Project's climate change aspects. A framework or protocol will be developed for construction management practices in and around school facilities. The Project will avoid or minimize land acquisition as much as possible. Land acquisition and impacts on livelihoods will be screened up-front using a joint environmental and social screening form. The UCP´s safeguards team, as well as the MDODs that will be contracted to support project implementation, will be involved from an early stage in site selection and engineering/design studies, and will interact with communities during implementation of works to minimize the risk related to land acquisition.

83. **Stakeholder risk is rated Substantial**. Stakeholder risk is assessed as Substantial given the multiplicity of ministries and government units responsible for DRM and involved in project implementation (MICT, municipalities, communities, MENFP, BTB/MTPTC, CNIGS etc.). To address this risk, project activities will be implemented in a consultative manner and conflict resolution mechanisms will be put in place, e.g., Grievance Redress Mechanisms and fora for dialogue among CCPCs. Field consultations with CCPCs and communities as part of project preparation confirmed strong local uptake of project activities.

VI. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY: Haiti
Strengthening DRM and Climate Resilience Project

Project Development Objectives(s)

The Project Development Objective is to improve: (i) early warning and emergency evacuation capacity in selected municipalities in high climate risk-prone areas, and (ii) the provision of and accessibility to safe havens.

Project Development Objective Indicators

Indicator Name	DLI	Baseline	End Target
Population is warned with reliable information and provided with effective evacuation support			
Number of CCPCs with excellent competencies in emergency planning and management, in high climate risk-prone areas - Level 1 certification (Number)		0.00	10.00
Improved National Early Warning and Communication System for Hydromet events based on approved and adopted standard protocols (Yes/No)		No	Yes
Population takes refuge in a safe haven that is accessible and provides emergency needs			
Increase in number of people living in flood-risk areas who are covered by a safe haven (Percentage)		0.00	20.00
Increase in number of females living in flood-risk areas who are covered by a safe haven (Percentage)		0.00	20.00

Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	End Target
Strengthening Disaster Preparedness and Emergency Response Capacity & Promoting Building Regulation			
Number of CCPCs with improved competencies in emergency planning and management - Level 2 certification (Number)		118.00	140.00
Share of municipalities in risk-prone areas with an improved emergency preparedness and response capability (Percentage)		0.00	90.00
Percentage improvement in the level of understanding of early warning messages (Percentage)		0.00	60.00
Number of persons trained to apply resilient construction techniques (Number)		0.00	17,000.00
Construction and rehabilitation of safe havens			
Number of safe havens constructed/rehabilitated by the project (Number)		0.00	30.00
Number of safe havens constructed/ rehabilitated by the project benefitting from gender friendly infrastructure design (Number)		0.00	27.00
Share of women participation in the shelter management committees for each “safe-haven” constructed/ rehabilitated by the project (Percentage)		0.00	50.00
Share of women leadership in the shelter management committees for each “safe-haven” constructed/ rehabilitated by the project (Percentage)		0.00	50.00
Percentage of grievances appropriately addressed as part of the Project (Percentage)		0.00	90.00
Percentage of beneficiaries reporting satisfaction with project interventions (Percentage)		0.00	90.00

Monitoring & Evaluation Plan: PDO Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Number of CCPCs with excellent competencies in emergency planning and management, in high climate risk-prone areas - Level 1 certification	Number of level 1-certified CCPC with competencies in emergency planning and management rated as excellent, out of the 70 municipalities in high climate risk-prone areas. The certification is a measure of CCPC's ability to handle emergency situations. It validates adequate training in Internal management, Shelters management, Emergency planning, operations and links with local authorities. This certification encompasses 4 levels Level 1 : Excellent Level 2 : Good Level 3 : Average Level 4 : Weak	Annual	Evaluation of CCPCs and reports from the UCP/ MICT	Evaluation by a consulting firm	UCP/MICT
Improved National Early Warning and Communication System for Hydromet events based on approved and adopted	The DPC approved and adopted a comprehensive protocol, cascading from	Annual	Reports from the UCP/ MICT	Provision of the finalized and approved protocol	UCP/ MICT

standard protocols	national to departmental to regional and local level to spread timely information to the population and trigger evacuation processes in case of an adverse climate event.				
Increase in number of people living in flood-risk areas who are covered by a safe haven	Percentage increase of number of people living in flood areas in the five departments with access to safe havens. Safe havens constructed/ rehabilitated by the project take into account gender, disability and resilience to natural hazards standards. 20 percent increase in the number of people covered by a shelter is an estimation based on limited baseline information in the Gran Sud. Today, preliminary estimations indicate that existing shelters cover about 58,000 of the 230,000 people at risk in 69 section communales of the Grand Sud (about 24 percent coverage). The shelter data collection currently ongoing under PRGRD will provide	Annual	Reports from the UCP/ MICT	GIS analysis after completion of construction works and Technical audits	UCP/ MICT

	more detailed baseline data on current shelter capacity.				
Increase in number of females living in flood-risk areas who are covered by a safe haven	Percentage increase of number of females living in flood areas in the five departments with access to safe havens. Safe havens constructed/ rehabilitated by the project take into account gender, disability and resilience to natural hazards standards	Annual	Reports from the UCP/ MICT	GIS analysis after completion of construction works and technical audits	UCP/ MICT

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Number of CCPCs with improved competencies in emergency planning and management - Level 2 certification	Number of level 1-certified CCPC with improved competencies in emergency planning and management rated as excellent. The certification is a measure of CCPC's ability to handle emergency situations. It validates adequate training in Internal management, Shelters management, Emergency planning, operations and links with local authorities. This	Annual	Evaluation of CCPCs and reports from the UCP/MICT	Evaluation by a consulting firm	UCP/MICT

	certification encompasses 4 levels Level 1 : Excellent Level 2 : Good Level 3 : Average Level 4 : Weak				
Share of municipalities in risk-prone areas with an improved emergency preparedness and response capability	Percentage of targeted municipalities for shelters investments, with an and updated and effective municipal contingency plan	Semi-annual	Reports from the UCP/MICT	Internal assessments, baseline to be established	UCP/MICT
Percentage improvement in the level of understanding of early warning messages	Measured improvement of population's understanding of Early warning messages on the basis of a survey that will be undertaken at the beginning of the project to establish the baseline in selected municipalities	Twice during project implement ation (once at mid-term and once at the end of the project)	Reports from the UCP/ MICT	Survey conducted by a consulting firm at the local level	UCP/MICT
Number of persons trained to apply resilient construction techniques	Number of persons (municipal staff, masons, homeowners, architects and engineers) in the targeted municipalities provided with construction advisory, training in safe construction practices, and awareness towards climate change and	Semi-annual	Data collected by BTB after the completion of each training	Progress reports from the BTB delivered to UCP/MICT	UCP/ MICT

	adaptation/ mitigation measures applicable to construction				
Number of safe havens constructed/rehabilitated by the project	Number of safe-havens constructed or rehabilitated by the project in selected municipalities in the climate risk-prone areas.	Semi-annual	Reports from MDOD, which feed into progress reports from UCP/MICT	MDOD regularly collects data on shelter construction progress	Data collected by MDOD and transferred to UCP/MICT
Number of safe havens constructed/ rehabilitated by the project benefitting from gender friendly infrastructure design	Number of shelters constructed or rehabilitated by the project using shelter designs meeting international standards that consider women's and girls' physical safety and needs.	Semi-annual	Reports from MDOD, which feed into progress reports from UCP/MICT	MDOD regularly collects data on shelter construction progress and respect of gender-friendly designs	Data collected by MDOD and transferred to UCP/MICT
Share of women participation in the shelter management committees for each "safe-haven" constructed/ rehabilitated by the project	At least 50 percent of community-led shelter management committees participants are women	Semi-annual	Reports from MDOD, which feed into progress reports from UCP/MICT	MDOD collects data on shelter management committees organizational structure at the start and through the shelter construction	Data collected by MDOD and transferred to UCP/MICT
Share of women leadership in the shelter management committees for each "safe-haven" constructed/ rehabilitated by the project	At least 50 percent of community-led shelter management committees focal points are women	Semi-annual	Reports from MDOD, which feed into progress reports from UCP/MI	MDOD collects data on shelter management committee organizational structure at the start and through shelter construction	Data collected by MDOD and transferred to UCP/MICT

			CT		
Percentage of grievances appropriately addressed as part of the Project	Complaints related to the project activities are timely addressed by the PIU in collaboration with local authorities in accordance with the project Grievance Redress Mechanism.	Semi-annual	Reports from the UCP/MICT	Each complaint reported is recorded in a monitoring system when received	UCP/MICT
Percentage of beneficiaries reporting satisfaction with project interventions	Measured on the basis of the "Citizens Perception Survey" that will be undertaken at the beginning of the project to establish the baseline (Component 2)	Twice during project implement ation (once at mid-term and once at the end of the project)	Reports from the UCP-DPC/ MICT	Survey conducted by a consulting firm at the local level	Consulting firm / UCP-DPC/MICT

ANNEX 1: Implementation Arrangements and Support Plan

I. Project Institutional and Implementation Arrangements

1. **Project implementation would be under the responsibility of the MICT**. All Project activities would be implemented by the UCP/MICT. The UCP/MICT will delegate management of most day-to-day operations to MDODs, which could be NGOs or international organizations for the rehabilitation/construction of safe havens. This option would streamline implementation and coordination arrangements, and could speed up implementation, as the UCP/MICT is currently implementing two DRM related World Bank-financed projects, and will soon also be implementing an IDB-financed Urban Development Project. The UCP/MICT will be responsible for day-to-day administration of overall planning, coordination, technical, fiduciary (i.e., procurement and FM), environmental and social safeguards compliance, monitoring and evaluation, reporting and communication on all activities of the Project. However, the UCP/MICT would need to be significantly strengthened to acquire technical know-how in managing investments in infrastructure construction and rehabilitation, meeting safeguards requirements, as well as coordinating multi-sectorial engagements. For this purpose, a Project Coordinator will be hired, and a Technical Socio-Environmental Unit will be established within the UCP/MICT and will be staffed with key technical personnel including an engineer, an assistant engineer, a monitoring & evaluation specialist, and safeguards specialists, to be fully dedicated to the infrastructure and technical training components of the Project.

2. **A project Operations Manual has been prepared and describes the operational details for the implementation of the Project**. The purpose of the Operations Manual is to provide an ordered set of instructions on the organization, procedures, and resources dedicated to the efficient and effective achievement of the objectives of the Project.

3. **The GoH will prepare bi-annual progress reports, in accordance with the formats outlined in the Operations Manual.** The progress reports will cover: (i) physical and financial progress achieved against agreed indicator targets (presented in section VI); (ii) issues and problem areas, including remedial actions; and (iii) work programs and cost estimates for the coming year, including revised estimates for the current period.

4. **Project Stakeholders**. As indicated above, various institutions will be direct beneficiaries of project activities, including the BTB/MTPTC, CNIGS/MPCE, and MENFP. Although these institutions would benefit from the Project, their role would be limited to providing strong technical advisory to guide the activities in line with their respective mandate. Throughout project preparation, a single implementation agency and a clear definition of other line ministries' roles would be established. Inter-agency working arrangements will be agreed at the beginning of the Project and will follow existing government guidelines.

Financial Management and Disbursement

5. The FM risk for this Project is deemed High as it poses important administrative and operational challenges. The FM function will be carried out by UCP/MICT, which currently undertakes FM in other IDA financed projects (PRGRD – P126346, and MDUR P155201). UCP/MICT structure will need to be strengthened and extensive FM support will be needed to further build administrative capacity for financial information control, budget planning and execution monitoring. A financial management specialist with experience in decentralized projects will be hired and will be dedicated to the project from the beginning of implementation in order for UCP/MICT to efficiently control financial information and cash flow to MDODs.

6. Investment and project activities financed under Component 2 (Construction and rehabilitation of "Safe Havens"), will be delegated to MDODs, which could be either an international agency or private agencies, and the selection process will need to follow strict eligibility and selection processes in order to ensure they possess adequate technical, administrative and operational capacities. UCP/MICT will need to put in place adequate supervision and monitoring procedures for Component 2 activities delegated to MDODs, in order to ensure that project activities and investments are satisfactorily implemented and accounted for.

7. **Budgeting arrangements**. The Project will be financed entirely by IDA grant proceeds, without Government counterpart funding. UCP/MICT will be responsible for preparing the annual operational plan and budget, to be approved by the World Bank before the end of the fiscal year. It will monitor progress quarterly and bi-annually through overall and fiduciary supervision, as well as progress and financial reports (bi-annual interim unaudited financial reports and annual audits). The annual operational plan and budget will be prepared by project component and sub-component, and will include detailed information on operational costs that will also need to be reviewed and approved by the Bank.

8. **Accounting and budget systems**. UCP/MICT uses the ACCPAC accounting system for accounting of PRGRD-P126346 and MDUR-P155201; however, this system has not been set to keep separate accounting and financial records for each project. Before the implementation of the Project, it will be necessary to complete the setup of the accounting system to allow separate financial and accounting records and reporting for each project. The system will also need to identify funds received and expenditures by project component and sub-component, and disbursement category. A consultancy service is in progress to finalize the system´s parametrization to adapt it according to the Project´s requirements.

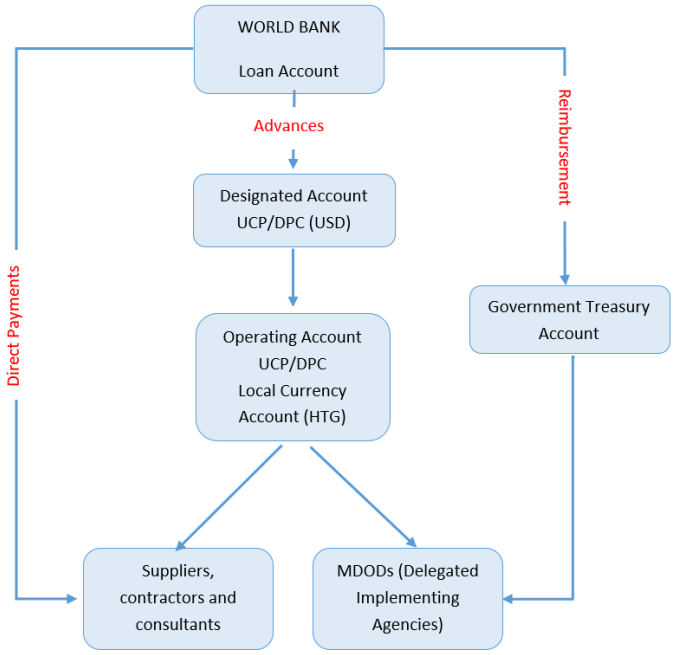
9. **Financial Reporting**. Interim unaudited financial reports (IFRs) will be prepared and submitted bi-annually no later than forty-five days after the end of the fiscal semester. The format and content of IFRs, acceptable to the World Bank, are detailed in the Project Operations Manual. IFR will allow the World Bank to monitor disbursements, financial and budgetary project information. Project financial information will include the use of funds by MDODs. MDODs will submit to UCP/MICT progress and financial reports and this information will be consolidated by UCP/MICT and presented in the project IFRs and audited financial statements.

10. **Internal control and internal audit**. UCP/MICT does not have an internal control unit within its organizational structure, as part of the overall implementation arrangements. A Project Operations Manual has been prepared and will be followed by the UCP/MICT, which describes, among other things, specific financial management arrangements and internal control procedures.

11. Specific mechanisms to control and safeguard the Project's financial information and assets are incorporated in the Project Operations Manual, which also includes detailed eligibility criteria and procedures to select and engage MDODs for the implementation of activities and investments delegated to these agencies and ensure the use of project funds for intended purposes. It is also envisaged to incorporate guarantees or insurance mechanisms for funds transferred to MDODs until they are totally documented or recovered. Adequate supervision and monitoring procedures for delegated activities are also included in the Project Operations Manual, to ensure that project activities and investments are timely and satisfactorily implemented and accounted for.

12. **Disbursement and Flow of Funds.** The main disbursement method will be the advance of funds and direct payments. Project funds, except those related to MDODs, will be advanced to a designated dedicated account in US dollars at the Central Bank. An additional account in local currency (HTG) will be opened for managing funds and making

payments for project activities. Advanced funds will be documented by UCP/MICT to account for grant proceeds and the designated account will be replenished using Statement of Expenditures (SOE), as agreed with the World Bank. For MDODs, the direct payment method will be used. The reimbursement method will also be available for the Project.



13. **External Audit**. Annual audits on project financial statements and eligibility of expenditures will be performed in accordance with World Bank policy, under terms of reference and by an independent auditor acceptable to the World Bank. The scope of the audit will include the review of project investments and activities delegated to MDODs and ensure that project proceeds are used for the intended purposes.

14. **FM Supervision.** The World Bank will conduct at least two FM supervisions per year. FM performance and compliance will also be monitored through the review of bi-annual IFR and yearly audit reports, and may also include the inspection of MDOD records and documents.

Procurement

15. Procurement for works, goods, non-consulting, and consulting services to be financed by the credit will follow the procedures specified in the "World Bank Procurement Regulation of Goods, Works and Non-Consulting Services under "World Bank Procurement Regulations for Borrowers under Investment Project Financing" dated July 1, 2016 revised August 1, 2018 and the World Bank's Anti-Corruption Guidelines: "Guidelines on Preventing and Combatting Fraud and Corruption," revised in June 2016.

16. The procuring entity as well as bidders, and service providers, i.e. suppliers, contractors and consultants shall observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with paragraph 3.32 and Annex IV of the Procurement Regulations.

17. The Recipient shall prepare and submit to the Bank a General Procurement Notice (GPN) and the Bank will arrange for publication of GPN in United Nations Development Business (UNDB) online and on the Bank's external website. The Recipient may also publish it in at least one national newspaper.

18. The STEP system will be used to prepare, clear, and update the Procurement Plans and for procurement transactions. This textual part, along with the Procurement Plan tables in STEP, constitute the Procurement Plan for the project.

19. The Recipient shall publish the Specific Procurement Notices (SPN) for all goods, works, non-consulting services, and the Requests for Expressions of Interest on their free-access websites, if available, and in at least one newspaper of national circulation in the Recipient's country, and in the official gazette. For open international procurement selection of consultants using an international shortlist, the Recipient shall also publish the SPN in UNDB online and, if possible, in an international newspaper of wide circulation; and the Bank arranges for the simultaneous publication of the SPN on its external website.

20. **The Bank's standard procurement documents will be used for all contracts** that are subject to international competitive procurement. For procurement in the national market, GoH procurement procedures may be used in accordance with the National Procurement Arrangements (paragraph 5.3) of the Procurement Regulations. This will be specified in the Procurement Plan tables in STEP. When the GoH uses national open competitive procurement arrangements, as set forth in the 2009 Law specifying the general rules relating to Public Contracts and Public Service Concession Agreements, such arrangements will be subject to paragraph 5.4 of the Procurement Regulations and the conditions included in the Grant Agreement. National procurement arrangements, other than national open competitive procurement arrangements applied by the GoH, will be subject to paragraph 5.5 of the Procurement Regulations.

21. The recruitment of civil servants as individual consultants or as part of the team of consulting firms will abide by the provisions of paragraph 3.23 (d) of the Procurement Regulations.

22. **Institutional arrangement for procurement.** The UCP/MICT will have the overall responsibility to carry out procurement activities for the project. The procurement capacity assessment concluded that the UCP/MICT to has strong experience in the World Bank and GoH procedures for implementing World Bank financed projects in the past. The unit has a clear manual in place that will be amended and use for this project. However, this Project will bring an additional workload to the already existing projects. The main risks identified are (i) delays in the implementation of projects, and (ii) poor deliverable due to the lack of enough anticipation and appropriate contract management mechanism in place. To mitigate the identified risks, it is agreed to (i) appoint a second Procurement Specialist with relevant experience in donor-funded procurement, particularly in World Bank or IDB procurement rules and procedures; (ii) strengthen the technical team, and (iii) prepare an appropriate procurement plan with anticipation on some key contract.

23. The second Procurement Specialist will work closely with the current UCP/MICT Procurement Specialist and with the Accredited Procurement Specialist of the World Bank Office. They will benefit from procurement clinics and training organized by the World Bank to be familiar with the new procurement framework.

24. **Operational Costs.** Operational costs financed by the Project would be incremental expenses, including office supplies, vehicles operation and maintenance cost, maintenance of equipment, communication costs, rental expenses, utilities expenses, consumables, transport and accommodation, per diem, supervision costs, and salaries of locally

contracted support staff. Such services' needs will be procured using the procurement procedures specified in the Project Operations Manual accepted and approved by the Bank.

25. **Filing and record keeping.** The Procurement Procedures Manual will set out the detailed procedures for maintaining and providing readily available access to project procurement records, in compliance with the Financing Agreement. The UCP/MICT will assign one person responsible for maintaining the records. The logbook of the contracts with unique numbering system shall be maintained.

26. The signed contracts as in the logbook shall be reflected in the commitment control system of the Recipient's accounting system or books of accounts as commitments whose payments should be updated with reference made to the payment voucher. This will put in place a complete record system whereby the contracts and related payments can be corroborated.

27. The procurement arrangements applicable under Component 3 "Contingent Emergency Response" are described in the Operation Manual, which has been prepared by the Beneficiary and agreed with the Bank.

28. **Project Procurement Strategy for Development (PPSD).** To determine the adequate and optimal procurement strategy for the best market response, a PPSD has been prepared to adequately consider, among others, the market situation, operational context, past experiences and risks. The PPSD and an 18-month procurement plan have been prepared by the Recipient with the support of the Bank and approved. The Key activities identified under Component 1 and 2 of the projects consist of : (i) consultants' services for training and technical assistances; (ii) a firm to design the infrastructures and prepare the technical documents; and (iii) the selection of MDODs to implement activities under component 2. The UCP/MICT will use the international approach to the market and the most appropriate and competitive selection methods.

29. **Procurement Methods and Thresholds**. Thresholds for procurement methods and prior review are shown below.

Table 1. Thresholds for Procurement Methods and Prior Review

Expenditure Category	Contract Value (Threshold) (US$, thousands)	Procurement Method	Market Approach	World Bank Prior Review or as Indicated in the Procurement Plan
1. Works	>3,000	Request for bids	Open, limited, international, single stage	All
	<3000	Request for bids	Open, national, single stage	None
	<1000	Request for quotations	limited, national or international, single stage	None
	Regardless of value	DS	Direct, single stage	> 3 000
2. Goods	>500	Request for bids Request for proposal	Open, limited, international, single stage	All
	<500	Request for Bids / Request for	Open, limited, international national,	None

Expenditure Category	Contract Value (Threshold) (US$, thousands)	Procurement Method	Market Approach	World Bank Prior Review or as Indicated in the Procurement Plan
		quotations	single stage	
	Regardless of value	DS	Direct, single stage	> 500
3. Consultant Services	>300	QCBS	Open, International, short list	All
	<300	QCBS, QBS, CQS, FBS, LCS (according to Procurement Plan)	Open, national, short list	All terms of reference.
	Regardless of value	Direct Selection	Direct	> 300
	Regardless of value	IC	Open, limited	
	Regardless of value	Direct Selection	Direct	> 100

Note: CQS = Selection Based on the Consultants' Qualifications; DS = Direct Selection; FBS = Selection under a Fixed Budget; IC = Individual Consultant; LCS = Least-Cost Selection; QBS = Quality-Based Selection; QCBS = Quality- and Cost-Based Selection.

30. **Procurement Risk Rating.** The project procurement risk prior to the mitigation measures is "High". The risk can be reduced to a residual rating of "Substantial" upon consideration of successful implementation of mitigation measures. The risks and mitigation measures are listed in table below.

Table 2: Procurement Risks and Mitigation Measures

Risk Description	Description of Mitigation	Risk Owner
Lengthy process for site identification and preparation of technical files	Use advance contracting for the preparation of the technical studies and the preparation the Bidding documents	UCP/MICT
Mediocre performance of contractors and delay in the contract execution	Select qualified firms/ NGOs for MDODs and develop a contract management system	UCP/MICT
Poor Quality of the procurement documents at the MDOD level	UCP/MICT should agree with each MDOD on the standards documents to be used to select sub-contractors and control the document	UCP/ MICT
Loss of documents - Archiving System	Provide details description on documents fillings, use STEP to files procurement documents	UCP/ MICT
Failure to manage the MDOD contracts and the sub contract	Set in place a very good system to manage MDODs' contracts and supervise activities on the sites	UCP/MICT
Mis understanding of the new procurement framework	Training sessions for the procurement staffs	Bank
Heavy workload	Recruitment a second procurement Specialist who will reinforce the procurement unit of the UCP/MICT to avoid delays in the implementation of the project	UCP/MICT

31. **Procurement Plan.** UCP/MICT prepared a detailed 18-month procurement plan of the Grant. The Procurement Plan will be updated in agreement with the Bank Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

II. Implementation Support Plan

32. The strategy for Project Implementation Support has been developed based on the nature of the Project and its risk profile, as identified in the SORT table and discussed in the Key Risks section. It will aim to focus on the areas where the UCP/MICT need to be further strengthened namely in financial management, procurement, and safeguards. The supervision strategy will use several tools to review progress and respond to implementation issues. Implementation support that will be provided on each of the risk elements of the SORT table are summarized below.

33. **Political and Governance**. The task team will provide close implementation support and adjust interventions as needed to minimize potential disruptions to the Project caused by political instability and governance factors.

34. **Macroeconomic.** The World Bank will provide close implementation support to the UCP/MICT in: (i) prioritizing intervention in existing public sites, and (ii) maintaining regular dialogue and coordination with institutions that will be responsible for the maintenance of each infrastructure investment.

35. **Sector Strategies and Policies**. The World Bank will provide dedicated TA to the DPC to support high level dialogue and strengthen sector strategies.

36. **Institutional Capacity for Implementation and Sustainability**. The World Bank will provide technical assistance and implementation support to strengthen the operational capacity of the UCP/MICT for project design, prioritization, management, and supervision.

37. **Fiduciary.** Capacity of UCP/MICT FM and procurement staff will be strengthened through TA and close and regular World Bank implementation support. More detailed mitigation measures for FM and procurement risks are presented in the previous section.

38. **Social and Environmental**. The World Bank will provide regular training to the PIU staff, as needed, on: (i) labor and health and safety issues; (ii) codes of conduct, including on addressing/preventing gender-based violence; (iii) gender-specific interventions; and (iv) climate change aspects of the Project.

39. **Stakeholder**. The World Bank will provide close implementation support the GoH to ensure that activities are implemented in a consultative manner and that conflict resolution mechanisms are effectively being used.

40. **Implementation Support Missions (ISMs)**. The World Bank task team would undertake ISMs two or three times a year to review the project implementation performance and progress towards the achievement of the PDO. The World Bank may also undertake short technical missions and will keep regular contact with the UCP/MICT through telephone and videoconferencing. Given the fragile institutional context, the World Bank will more closely support the UCP/MICT in the early phases of the project, specifically:

- During the procurement process of MDODs and engineering design and construction firms;
- In the preparation and implementation throughout the Project of environmental and social documents considering the importance of an effective application of these instruments. Safeguards specialists will be included in semiannual missions and will ensure adequate trainings of the UCP/MICT staff, and
- Training to the UCP/MICT will also be provided by the World Bank's FM and Procurement Specialists. Supervision of the FM arrangements and procurement would be conducted semi-annually and in response to project needs.

Fiduciary missions will focus on the performance of UCP/MICT in managing contracts, procurement and financial matters.

41. **Mid-Term Review (MTR).** An MTR will be conducted no later than three years after the first disbursement. It will include a comprehensive assessment of the progress in achieving Project's objectives and will identify implementation issues that require adjustments.

42. **Implementation Completion**. Upon completion, an implementation review will be carried out to assess the Project's achievement towards its PDOs, as reflected by the Key Indicators in its Results Framework. Table 3 below summarizes the proposed skill mix and number of staff weeks expected to be required during the project implementation.

Table 3: Implementation support Plan and resource requirements

Time	Focus	Skills needed
First 12 months	Procurement of the design firm and MDODs for the Construction and rehabilitation of "Safe Havens" Technical assistance to strengthen the institutional structure of the DPC at all levels, risk education and communication, and risk data management.	TTLs, procurement and FM specialists, M&E specialists, civil engineers, institutional strengthening specialists, safeguards specialists, DRM specialists, IT specialists
Until mid-term review (year 2-3)	Support to the implementation of works	TTLs, procurement and FM specialists, M&E specialists, civil engineers, institutional strengthening specialists, safeguards specialists, DRM specialists, IT specialists
Mid-term review (year 3)	Mid- term review	TTLs, procurement and FM specialists, M&E specialists, civil engineers, institutional strengthening specialists, safeguards specialists, DRM specialists, IT specialists
Following mid-term review	Continued support to implementation of works, capacity building	TTLs, procurement and FM specialists, M&E specialists, civil engineers, institutional strengthening specialists, safeguards specialists, DRM specialists, IT specialists
Implementation Completion (year 5)	Undertake the evaluation of the Project as part of the Implementation Completion Report	TTLs, procurement and FM specialists, M&E specialists, civil engineers, institutional strengthening specialists, safeguards specialists, DRM specialists, IT specialists