



Mainstreaming Disaster Risk Management in Public Infrastructure Management in Haiti

Context and Objectives

As a result of vulnerable infrastructure, unplanned and rapid urbanization, and institutional fragility, Haiti is at severe risk of natural hazards and disaster events, the frequency and intensity of which are being exacerbated by climate change. Most of the country is exposed to two or more major hazards including tsunamis, hurricanes, floods, earthquakes, and landslides. In these circumstances, even moderate events have disastrous consequences, resulting in significant loss of life. Poverty reduction efforts and inclusive economic growth are also vulnerable to disaster-induced shocks, as most poor households can be economically impacted by just one shock. It is therefore critical that in order to protect lives and development gains, vital public infrastructure must be made disaster resilient. This is especially the case with educational facilities such as schools, as they are regularly used as shelters in the aftermath of disasters such as the 2010 earthquake and Hurricane Matthew in 2016.

The goal of the “Mainstreaming Disaster Risk Management in Public Infrastructure Management in Haiti” Technical Assistance (TA) is to reduce the vulnerability of public infrastructure to natural disasters by reducing existing risks and avoiding new ones through risk-informed construction and retrofitting of infrastructure. The TA is supporting the government of Haiti in promoting and integrating the principles of disaster risk management with regards to public infrastructure management, and especially focusing on educational facilities. The TA supports the implementation of the World Bank-financed Haiti Development Policy Financing with a Catastrophe-Deferred Draw Down Option (Cat-DDO).

Main Activities

- **Component 1: Education Infrastructure Disaster Risk Diagnostic and Analysis:** Investment scenarios are recommended to the Ministry of Education that integrate safety into both existing and proposed school infrastructure. This action is coordinated with the Model Safe School Program of the Caribbean Disaster Emergency Management Agency (CDEMA) to ensure complementarity. This component will follow the 8 steps of the Roadmap for Safer and Resilient Schools (RSRS) developed by the Global Program for Safer Schools (GPSS), which are as follows:
 - **Step 1: School Infrastructure Baseline:** establish a baseline of existing school infrastructure facilities and the demand for new school infrastructure.
 - **Step 2: School Infrastructure Policy:** gain an understanding of the policy framework that governs school infrastructure and the projected demand for classrooms.
 - **Step 3: Construction Environment:** gain an understanding of the institutional environment and regulatory framework within which school infrastructure is planned, designed, constructed, operated, maintained, repaired, and retrofitted in order to determine the factors placing school infrastructure at risk
 - **Step 4: Financing Environment:** gain an understanding of the financial environment within which school infrastructure is planned, designed, constructed, operated, and maintained.



- **Step 5: Risk and Resilience Assessment:** provide guidance to quantify the potential damages and losses to school infrastructure due to adverse natural events of various intensities and frequencies.
 - **Step 6: Intervention Strategy:** consolidate the requirements and alternatives for the structural rehabilitation/retrofitting of the school infrastructure portfolio based on the results of the risk assessment.
 - **Step 7: Investment Plan:** define a prioritized and affordable intervention strategy in keeping with the construction and financial environment (Steps 2 and 3), government priorities (Step 1), and local territorial characteristics (urban or rural).
 - **Step 8: Implementation Strategy:** recommend implementation strategy to the MENFP that integrate safety into both existing and new school infrastructure.
- **Component 2: Diagnostic on Resilience of Critical Public Infrastructure:** This activity emphasizes the importance of building resilient infrastructure systems to provide reliable services to fulfill critical needs in the aftermath of a shock. The TA will provide a diagnostic of Haiti's critical public infrastructure (such as transport, energy, water) by:
 - Identifying the effects of natural hazards on infrastructure systems and service provision;
 - Assessing how service provision is restored after a shock;
 - Identifying constraints that prevent building resilient infrastructure and adapting old infrastructure to current and future needs;
 - Informing on actions that can improve the reliability of service provision, increase asset life, and improve people's well-being.

Results

A series of activities have been prepared, including the finalization of a Safer Schools rapid diagnostic. However, due to COVID-19, the launch of this activity has been delayed until early 2021. Further activities based on the recommendations of the diagnostic will start once the diagnostic has been officially shared.

The project supports the implementation of the upcoming \$20 million World Bank *Haiti Covid-19 Response and Resilience Development Policy Operation*.

Partnerships and Coordination

The project is undertaken jointly with institutions of the government of Haiti including the Ministries of Public Works, of the Interior and Local Authorities, of Education, of Economy and Finance, of Planning, and of External Cooperation.



Country

- Haiti

Region

- Caribbean

Caribbean Regional Resilience Building Facility component

- Adaptation Facility for Leveraging Investments in Resilience in the Caribbean

Amount approved

- \$351,803