1 IDB Lab

SUMMARY OF THE PROJECT IN DESIGN * (*)

Creating an earthquake early-warning (EEW) system for Haiti.

PITCH ELIGIBILITY DATE	COUNTRY(IES)	
10/29/2021	H	laiti
PARTNER(S)		
Grillo Sistemas S.A.P.I.		
PRELIMINARY CLASSIFICATION ENVIRONMENTAL AND SOCIAL IMPACT		
B (**)		
TOTAL BUDGET	IDB Lab	LOCAL COUNTERPART AND
		COFINANCING
US 180,000	US 143,000	US 37,000
DESCRIPTION		

The problem Due to the presence of a fault line between large tectonic plates, a dense population, and vulnerable residential buildings, Haiti ranks among countries with the highest seismic risk in the world.

The solution Aside from structural refitting, Earthquake Early-Warning systems (EEWs) are the principal method for mitigating loss of life and injury from earthquakes. EEWs provide rapid detection of earthquakes and alerting of people and infrastructure at risk. The warnings can arrive seconds to minutes before strong shaking is felt, giving people sufficient time to protect themselves.

The beneficiaries The Haiti-EEW is an infrastructure that will benefit all Haitians in the south of Haiti and also Port-au-Prince. The alerts generated by this infrastructure can be widely broadcast through apps and SMS to reach a large number of Haiti's population. Additionally, 5 alarm devices with loudspeakers will be installed in schools near Les Cayes, which will protect hundreds of school children.

The partner Grillo offer an EEW solution that is especially suited to developing nations. The technology was developed and tested in Mexico with grants from USAID and others. The technology has been proven to be more effective than SASMEX, which has cost the Mexican government 10s of millions of USD over 2 decades. Grillo is now deploying the solution in the Caribbean, starting with Puerto Rico, and now Haiti in partnership with Digicel, Amazon Web Services and Clinton Global Initiative.

The IDB Lab's contribution The project requires \$180,000 for its pilot phase. IDB Lab will use its Prototype instrument to finance 80% of the project. The funds will be used to pay for the technical development, adaption and deployment of the systems (software engineering, IOT engineering, seismology) and hardware (sensors), and also to cover the cost of evaluation and knowledge dissemination through workshops in Haiti.

^{*}The information mentioned in this document is indicative and may be altered throughout the project cycle prior to approval. This document does not guarantee approval of the project.

^{**}The IDB categorizes all projects into one of four E/S impact categories. Category A projects are those with the most significant and mostly permanent E/S impacts, category B those that cause mostly local and short-term impacts, and category C those with minimal or no negative impacts. A fourth category, B13, is a catch-all category not related to severity of impacts; it covers non-investment lending and flexible lending instruments for which ex-ante impact classification may not be feasible, such as Financial Intermediary operations or Policy Based Loans.