

Building a Culture of Earthquake Resistant Construction Practices Among Day Laborers in Haiti

Haiti
Peter Haas



Organization type:

nonprofit/ngo/citizen sector

Budget:

\$250,000 - \$500,000

Website:

<http://www.aidg.org/confinedmasonry>

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Project Summary

Elevator Pitch

Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.

After the earthquake of January 12th 2010 in Port Au Prince Haiti, AIDG, in cooperation with the Multidisciplinary Center For Earthquake Engineering out of the University of Buffalo and KPFF consulting Engineers, began inspecting 1500 structures for damage. What those teams saw were the same construction mistakes happening over and over again. The source of those mistakes was an unskilled workforce that learns through apprenticeship basic building practices that are not appropriate for construction in earthquake zones. Based on experience of seeing things done wrong working with good foreman but unskilled workers AIDG realized that a mass training curriculum for day laborers was needed to fix the knowledge gap. We began training 10,000 masons in confined masonry to fill this gap.

About Project

Problem: What problem is this project trying to address?

Informal sector day laborers in Haiti and people living in housing built by these construction workers. Workers who have taken our courses can demand higher wages in the market place. People living in seismic risk zones get safer housing. AIDG is trying to influence practices in the construction boom that is about to take place, not just in Port Au Prince but across the country including Cap Haitien, Borgne Limbe, Milot, La Gonave, Gonaives, Jacmel, Leogane.

Solution: What is the proposed solution? Please be specific!

Currently in Haiti skills training on earthquake resistant construction is aimed at longer duration sessions for more established construction professionals. AIDG is reaching out to informal sector laborers throughout the country and is focusing on simple specific failure points in a one day training session. In building inspections and from interviews with construction professionals in country it is clear that many of the failure points can be the result of one person's bad workmanship. Most earthquake resistant construction courses in Haiti right now are aimed at giving a few hundred people detailed training. AIDG is the only groups in Haiti focusing on getting this training out to 10,000 day laborers across the country to try and influence practices in the on the job learning and apprenticeship system that trains new laborers. We focus on a few basic techniques that will make buildings safer instead of a detailed curriculum for a sampling of workers. Our goal is to change of few points of how Haitian builders teach each other to build, instead of just providing training to a few workers in Port Au Prince involved in reconstruction. To date we have trained over 2000 workers.

Impact: How does it Work

Example: Walk us through a specific example(s) of how this solution makes a difference; include its primary activities.

To date we've trained over 2000 masons. We are developing a retest for a statistically viable sample of the masons we have trained to determine

knowledge retained. We are developing SMS based surveys to determine number of buildings constructed and lives impacted over the next 5 years, which will be a critical time for construction in Haiti.

About You

Organization:

AIDG

About You

First Name

Peter

Last Name

Haas

About Your Organization

Organization Name

AIDG

Organization Phone

800-401-3860

Organization Address

PO Box 104, Weston, MA 02493

Organization Country

, MA

Country where this project is creating social impact**How long has your organization been operating?**

More than 5 years

The information you provide here will be used to fill in any parts of your profile that have been left blank, such as interests, organization information, and website. No contact information will be made public. Please uncheck here if you do not want this to happen..

Innovation

What stage is your project in?

Operating for less than a year

Share the story of the founder and what inspired the founder to start this project

This project was started by AIDG after inspecting 1500 buildings after the earthquake and seeing the same failure points again and again. AIDG's mission is to promote the use of appropriate technology to solve issues of basic infrastructure for undeserved communities. The extent of building collapse in Haiti represented the largest failure of infrastructure AIDG has ever faced. Chilean style confined masonry provided a simple appropriate technology solution.

Seeing people not waiting to rebuild and the actors addressing the problem relative moving painfully slowly relative to the scale of the issue AIDG worked with Haiti Rewired and KPFF consulting engineers to pull together a curriculum that would solve the major mistakes we witnessed in building failures, while also being accessible to day laborers and the general populace. We have now used this curriculum (available here in English: <http://aidg.org/documents/CM-Handout%20MASTER%20v3%20English.pdf>) with over 2000 masons with fantastic results and acceptance. We set a goal of reaching 10,000 masons with this curriculum with the intention of creating a critical mass of masons who would propagate basic confined masonry practice throughout Haiti.

Social Impact

How many people have been impacted by your project?

1,001 - 10,000

How many people could be impacted by your project in the next three years?

More than 10,000

What barriers might hinder the success of your project and how do you plan to overcome them?

Funding is the primary barrier, we bet heavily on getting reconstruction funding, that process did not move forward fast enough for us. As a result we scaled back the organization and restructured the trainings to be viable on a smaller staff. We're at a state right now that is supportable with our grassroots private fundraising while we continue to pursue larger grants.

How will your project evolve over the next three years?

We aim to train the 10,000 masons and look deeply through surveys at how much we are changing general practice in construction. After we have provided training to the first 10,000 workers we will look to transfer the training curriculum off to long term trade educational institutions and universities to embed the knowledge in the existing educational system.

For each selection, please explain the financial and non-financial support from each

AIDG has gotten a full range of support on this project including significant help from KPFF consulting engineers and the municipal governments in Cap-Haitien, Leoganne, and Delmas (in Port Au Prince). A more complete list of supporters can be found at <http://www.aidg.org/confinedmasonry>

How do you plan to grow and/or diversify your base of support in the next three years?

We aim to get one significant foundation commitment in the \$100,000-\$200,000 range and we aim to get a commitment from the IHRC in the \$100,000-\$200,000 range. In the meantime we aim to continue to cobble together support where we can to keep the program running.

Collaboration

Please select your areas of intervention in the home improvement market

Technical assistance, Labor, Infrastructure, Urban development, Rural development.

Is your innovation addressing barriers in the home improvement/progressive housing market? If so, please describe in detail your mechanisms of intervention

It is addressing the basic training received by the informal sector labor pool that is responsible for the majority of the construction in Haiti. Our trainings include both small group private sessions of under 30 workers and larger stadium sized trainings of several hundred masons, where theory is presented en masse and hands on working groups of 10-20 masons get separated out for the practical sessions.

Are you currently collaborating with private companies, or have you partnered with private companies in the past? With which companies?

KPFF consulting engineers is our primary partner for the project.

Please describe in detail the nature of the partnership(s)

KPFF provides certified structural engineers and helps us locate union masons from the US who help with the trainings.

Select the unit(s) with which the partnership was formed

Other (please specify).

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