

EWB-CU Fall 2015

Welcome Abroad



ENGINEERS WITHOUT BORDERS USA
COLUMBIA UNIVERSITY STUDENT CHAPTER

INTRODUCTION

- Hello!
- Session overview
 - Updates from travel teams
 - Q&A on how to get involved

GHANA PROGRAM



OVERVIEW

- 6-Stall KVIP Latrine
 - Kwasi Doi, Ghana
 - The 9th latrine built by Ghana program, 2nd KVIP
 - Improve community hygiene to prevent diseases
 - Community has 800 adults and before this only one double-stalled pit latrine
- Water Distribution System
 - Amanfrom, Ghana
 - Improve current community water infrastructure (quantity, quality, access)
 - The village has very limited access to water, especially during the dry season, and all of the water is contaminated

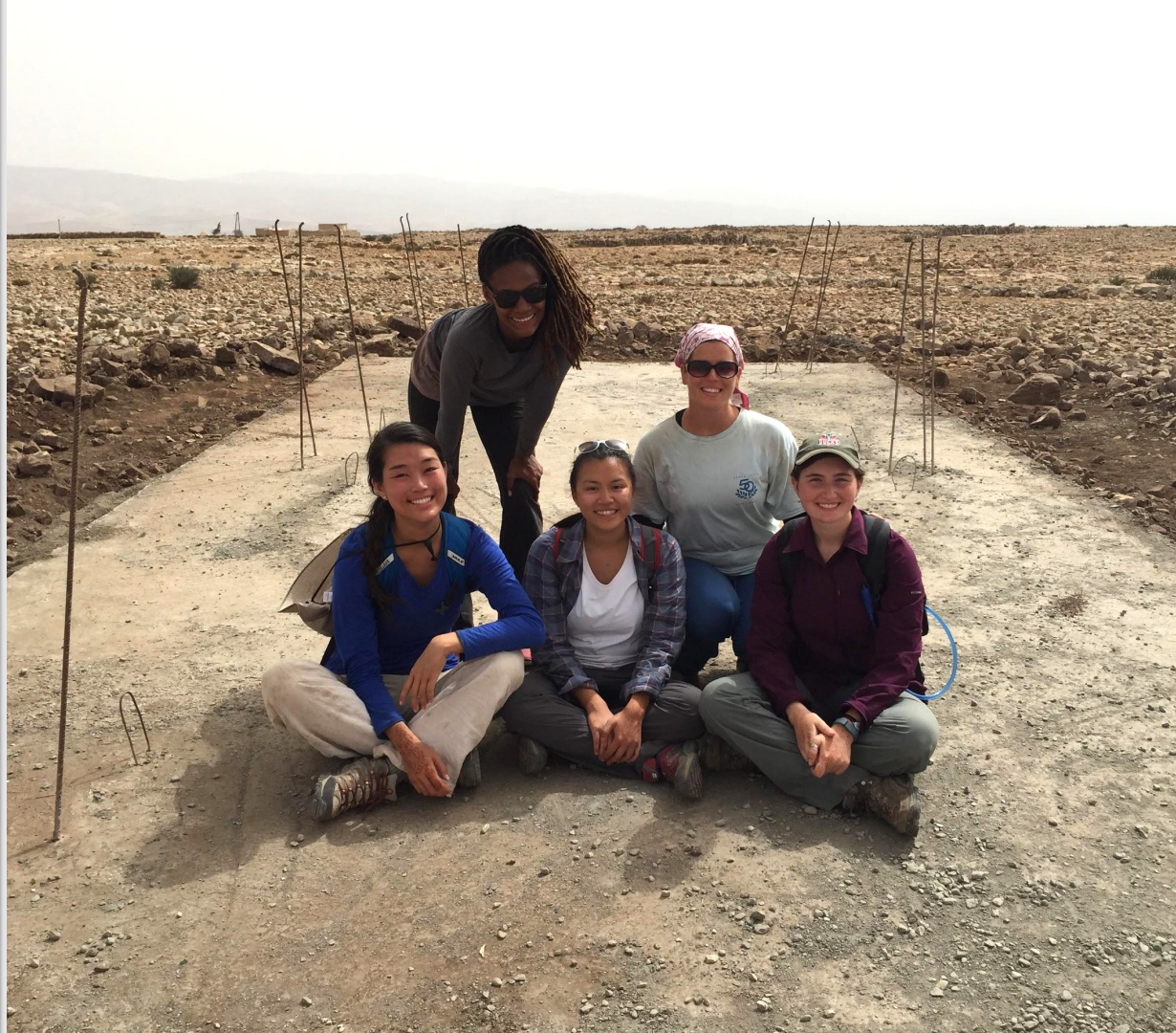
TRAVEL UPDATES

- Trip goals: *Implementation of a KVIP Latrine in Kwasi Doi & Assessment of Water Sources in Amanfrom*
- Implementation Update: Successfully built KVIP latrine and worked with community to establish sustainable plan for its maintenance
- Assessment Update: Collected water quality data, conducted topological surveys, determined quality of existing wells, collected data for potential wells

SEMESTER GOALS

- *Grants & Fundraising*
 - Raise enough money to cover all project costs, including travel for all members
 - Keep donors and alums updated
- *Latrine Team*
 - Oversee monitoring of the 9 latrines built
 - Work w/ community to develop latrine maintenance plan
- *Amanfrom Water Team*
 - Begin alternatives analysis and determine the next steps moving forward

MOROCCO PROGRAM



OVERVIEW

- Bridge

- Ait Bayoud, Morocco
- A 210 ft suspension bridge over the river.
- When it's rainy season, the river is impassable.

- Water Distribution System

- Izgouaren and Ilguiloda
- Source well, pump, piping, and chateau to make fresh water easily accessible.
- Two communities located on a plateau, can take up to 3-4 hours a day walking to the river to collect water.

TRAVEL UPDATES

- Trip goal: *Begin Implementation of Water Pipeline*
- Update 1:
 - Built concrete foundation for water tank



TRAVEL UPDATES

- Trip goal: *Begin Implementation of Water Pipeline*
- Update 2:
 - Laid 288 meters of piping (out of a total 1500 meters)!



SEMESTER GOALS

- Engineering
 - Operations & Maintenance Guide for Pipeline
 - Wind & Solar Energy Research and Design
 - Water Sanitation design for Chateau (water tank)
- Administrative
 - Grants & Fundraising
 - Mentor Outreach
- Future Travel
 - Implement More Piping
 - Alternative Energy Assessment
 - Water Sanitation Work

UGANDA PROGRAM



OVERVIEW

- MFP
 - In the agricultural district of Soroti, Eastern Uganda families spend several hours per week to meet their nutritional needs.
 - The multifunction platform uses diesel powered engines to create agricultural processing complexes across multiple sites, helping over 1000 families to date.

TRAVEL UPDATES

- Trip goal: *Monitor success of MFPs*
- Update: *Visited all active sites constructed minor structural alterations*



TRAVEL UPDATES

- Trip goal: *Design new exhaust system*
- Update: *Proposed cost-effective solution*



TRAVEL UPDATES

- Trip goal: *Evaluate and upgrade old sites*
- Update: Installed a new engine in Orungo



TRAVEL UPDATES

- Trip goal: *Create an exit plan*
- Update: *Agreed to two-year, site-specific plan with NGO*



SEMESTER GOALS

- MFP Closeout Team
 - Exit strategy within 2 years
 - Maintain contact with Pilgrim
 - Organise future trips
- New Project Team
 - Mentor search
 - Survey bridge possibilities
 - Examine future projects



Q&A