

EWB-JSC Thailand Project



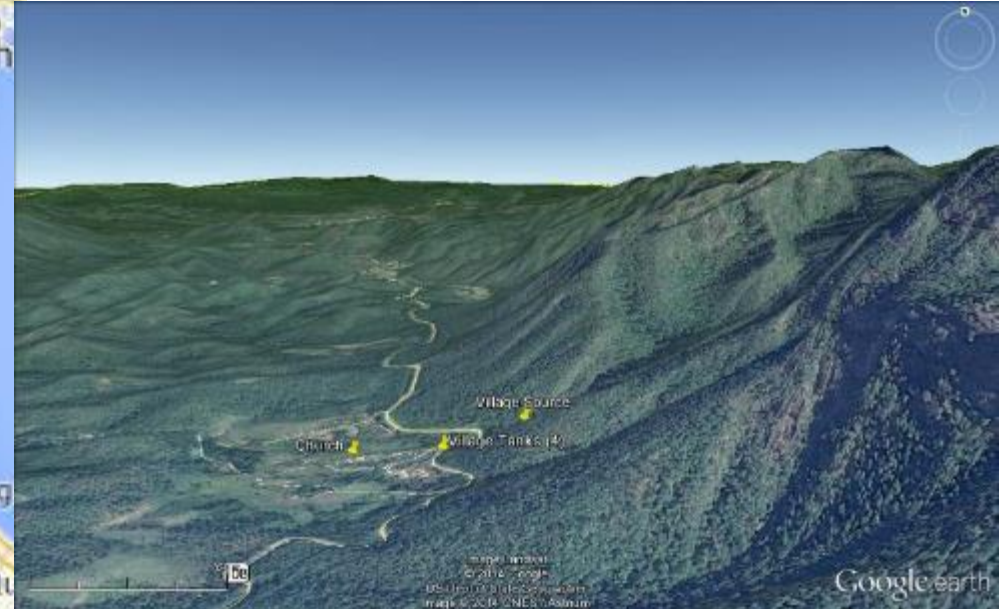
Implementation Trip – March 2016

Maejanoi, Thailand

- **Project:** Water Containment and Distribution
- **Community Name:** Maejanoi
- **Location:** Mae Hong Son, Northern Thailand
- **Purpose:** Maejanoi needs a system to collect and distribute water year-round. There is currently a water shortage in the dry season.
- **Outcome:** The community hopes to enhance quality of life by having access to water year-round thus leading to a self sustaining community.
- **Status**
 - Assessment trip completed November 2014
 - First implementation trip completed March 6-20, 2016 (storage tank)
 - Second implementation trip in May 2016 (pump, pipes)
 - Future work – water purification



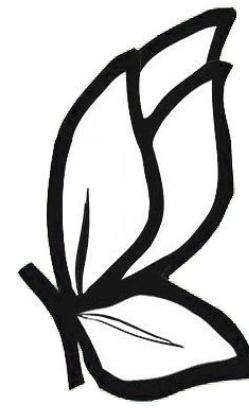
Maejanoi, Thailand



- Northwest Thailand bordering Myanmar
- 950 km from Bangkok
- 236 km from Chiang Mai
- People migrated from mountains and settled in the community
- Population ~200 (Karen Tribe)
- March weather
 - High ~100 F
 - Nights ~70 F
 - Smoky/hazy from forest fires
 - No rain since ~1 week prior to trip

Partnering NGO

Life Encounter Asia Foundation (LEAF)

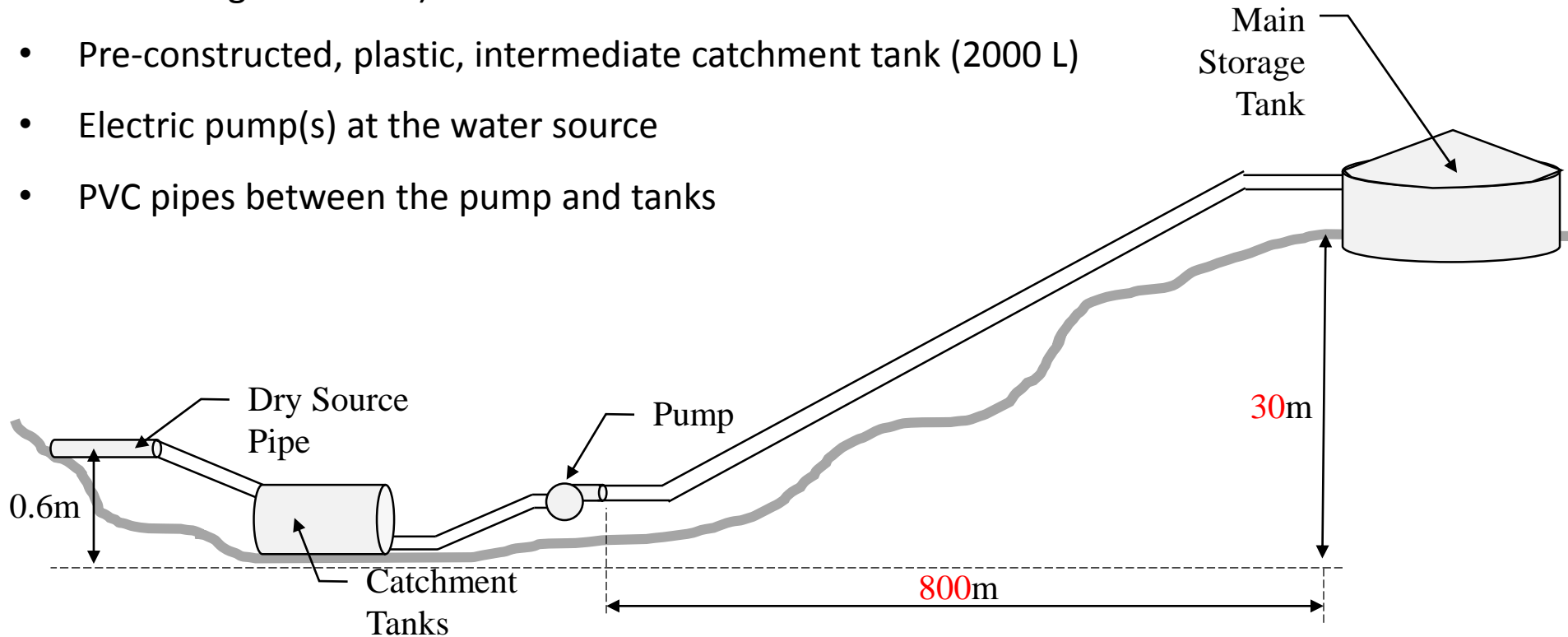


- Based in Bangkok
- Handles all accommodations & car rental
- Arranges meetings with government officials
- Accompany EWB team
- Translation Services (Karen → Thai → English)
- Encouraged Maejanoi to start savings fund for project



Water Containment Project

- March Trip
 - 40 m³ ferrocement main storage tank at village entrance
- May Trip
 - Small catchment tank (cement rings) at dry season water source (downhill from village entrance)
 - Pre-constructed, plastic, intermediate catchment tank (2000 L)
 - Electric pump(s) at the water source
 - PVC pipes between the pump and tanks

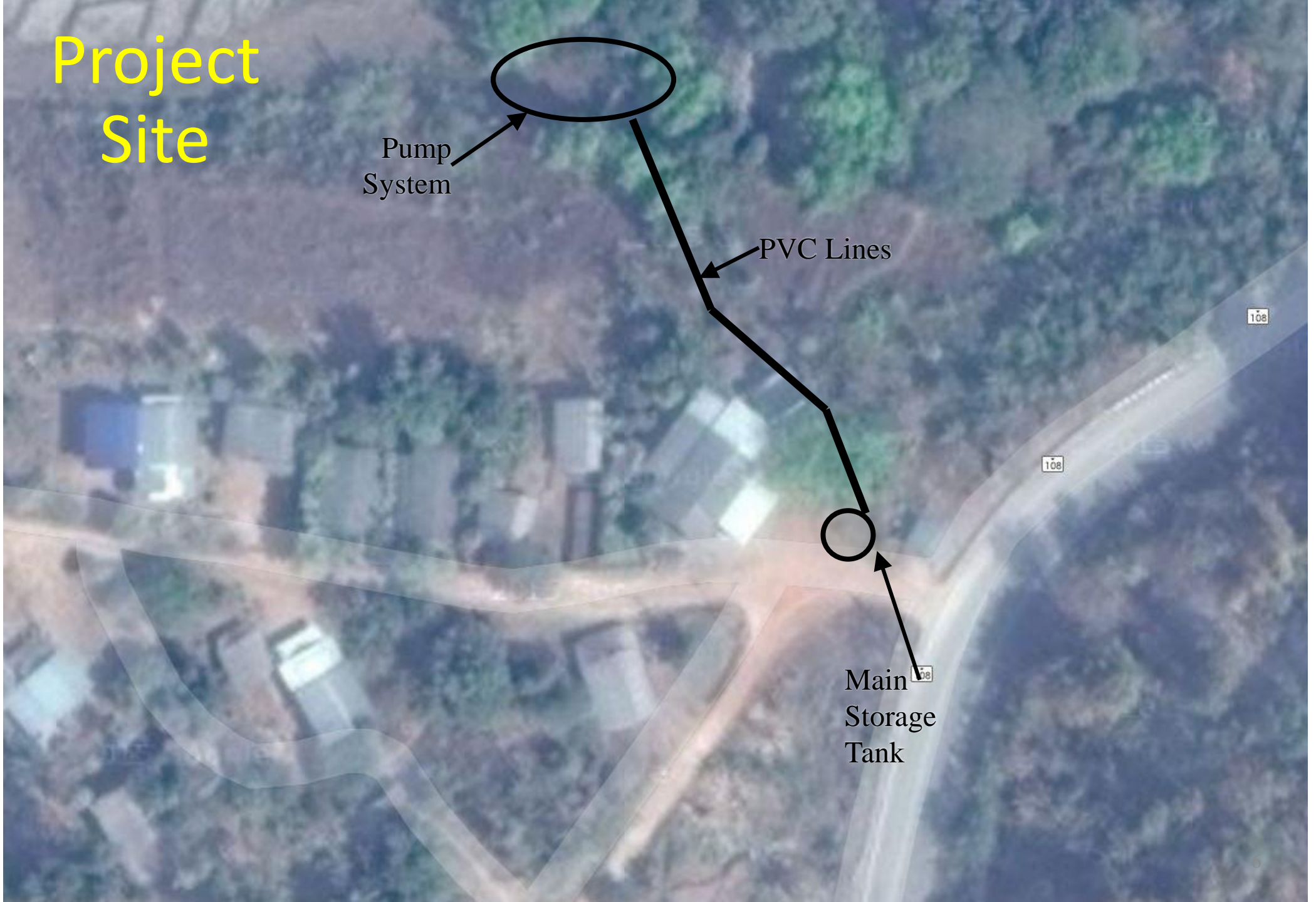


Project Site

Pump System

PVC Lines

Main Storage Tank



Travel Team

- Tom Bryan, JSC (Cimarron)
 - Chapter treasurer, project co-lead
- Jonathan Koenighain, Bechtel
 - Project co-lead, mechanical engineer
- Camilo Betancourt, Bechtel
 - Mechanical engineer, health/safety officer
- Mai Lee Chang, JSC
 - Education & PMEL lead, health/safety officer
- Anne Baghdanov, Bechtel
 - Civil engineer
- Miguel Segura Moreno, Bechtel
 - Civil engineer, tank design lead
- Joel Castaneda, JSC
 - Photographer



Travel



Flights

- Houston > Tokyo > Bangkok > Chiang Mai > Mae Hong Son

Round trip:

- 44 hours in planes
- 6 hours in van (1 flight cancelled)



Gifts for the village

Marking/clearing site





Base Slab

Tank stats

- 40,000 liter capacity
- 5m diameter
- 2m height
- 1.2 tons rebar

Base Slab













Mortaring the Walls





Explaining roof support structure



Ice cream break!







Hoops for the Roof









Almost complete...



Inside the tank





Trench for overflow/drain



Finishing Touches



Completed Tank





End of a long, hot day...

Dry Season Source



Elevation Measurements



Hardware Stores





Interested in getting involved?

- Regular project meetings every other Saturday from 10am-noon at Park Place Library
 - Next meeting – April 16
- Will begin plans for water purification soon
- Other needs
 - Fundraising
 - Operations & maintenance manuals
 - Research – pipe repair, organic farming



