

UN MUNDO CLEAN WATER & SANITATION PROJECT

The Un Mundo Water Connections program is a collective to bring clean water to the Cangrejal Valley residents. This regional effort focuses on building the capacity of local water boards to understand and plan for a truly effective system that is not just about a “new water system” but a holistic approach that encompasses the interconnection of clean water, sanitation and hygiene for a healthier community. El Pital was selected as the pilot community to implement this holistic approach.

The Water Connections program currently includes four active components:

1. El Pital Pilot Project (2015-2018)

The local community of El Pital, under the supervision of a locally formed Water Board, is designing a pilot project to build an energy-efficient clean water system that will provide treated and filtered water to homes and be replicated in the entire region. This project will not only significantly improve health for residents in the Cangrejal Valley, it will also provide local employment, environmental restoration, and education for local residents on matters of clean water, hygiene, sanitation, ensuring sustainability with their efforts.

In 2004, a rudimentary water system was constructed in El Pital for 16 families. A few years later the initial system had become overburdened with more than 80 families in need of water. In 2010, the local Water Board formed a partnership with Un Mundo and Engineers without Borders to help them build a drinkable water system that will be piped into all homes in El Pital and will successfully control water reuse and disposal.

One of the crucial first steps is building a gondola that will allow individuals to easily cross the Cangrejal River. This will provide reliable access to the cleanest water source, but will also be necessary for carrying supplies across the river for construction and maintenance and will ensure that it can continue during the rainy season when the Rio Cangrejal becomes flooded and nearly impossible to traverse.

In order to avoid further contamination of water sources, the program also includes rainwater drainage and waste water reusal systems, and composting toilets.

Pilot Project Accomplishments. The El Pital Water Board, Engineers Without Borders and Un Mundo have worked together since 2010 to accomplish the following 1) Developed community map 2) Developed work plan 3) Conducted training on financial management, reporting, water source protection, sanitation 4) Conducted community assessment survey 5) Designed and piloted a composting toilet project 6) Water Board received their certification from the government of Honduras 7) Conducted the topography study for the water project design 8) The water board extended the National Park “Nombre de Dios” to include the area surrounding the new water source. They petitioned the government, marked the area and the declaration was received and this area is now part of the park.

UN MUNDO CLEAN WATER & SANITATION PROJECT

Upcoming Water Connections Pilot Project Plans

- Implement educational curriculum (2015-18)
- Expand composting toilet project (2015)
- Complete water drainage system (2015)
- Complete water reuse and disposal system (2016-2018)
- Implement reforestation project (2015-2020)
- Construct water tank (2016)
- Construct piping system (2017)
- Connect piped water to homes (2018)
- Conduct maintenance, monitoring and training (2016-2020)

2. Capacity Building and Technical Assistance for Local Water Boards (2015-2020)

Since the launching of the pilot in El Pital, other communities expressed interest in a similar program for their communities. Un Mundo will work with individual water boards to assess their current situation, assets and needs and then develop capacity building efforts where needed.

3. Regional Environment and Water Commission (2016-2020)

Un Mundo plans to connect all the water boards to form a regional network to work on water and environmental issues together. The network would create a regional commission that meets quarterly to discuss common issues and develop a region-wide strategy.

4. Replicate Pilot Project in Other Communities (2016-2020)

After successfully implementing the pilot project in El Pital, Un Mundo plans to help neighboring communities implement similar water systems. This will be based on the capacity building with the local water boards and the regional strategies adopted.

Water Program Goals and Objectives (2015-2020)

Goal 1: Improve water quality and reduce the rates of parasitic illness, malaria and dengue fever by 15% in the region.

Objective 1A: Improve the collection and disposal of solid waste.

Objective 1B: Improve the current clean water access system.

Objective 1C: Control the disposal of used and rain water.

Objective 1D: Educate communities on topics of preventive health, clean water, hygiene, sanitation and environment.

Objective 1E: Improve the disposal of human wastes with composting toilets.

Evaluation of Goal 1

- Monitor incidence of parasitic, dengue and malaria annually with local health clinics.
- Track community knowledge attained through annual surveys.
- Track standing water pools throughout the communities each year.
- Measure sanitation improvements by number of families per year converting to composting toilets. Measure quantity of compost produced each year.
- Evaluate water quality through quality tests in streams/rivers/faucets twice yearly.
- Compile number of households connected to clean water systems.
- Compile number of households using rainwater drainage and water reusal systems.

UN MUNDO CLEAN WATER & SANITATION PROJECT

Goal 2: Increase water and forest conservation/reforestation efforts for the regional watershed and its surroundings.

Objective 2A: Ensure community protection around all existing or future drinking sources.

Objective 2B: Initiate reforestation efforts within a 30 hectare radius around any micro-watershed drinking sources that are currently deforested.

Objective 2C: Train farmers on alternative agricultural methods.

Objective 2D: Install or implement water monitoring systems to control water overuse.

Evaluation of Goal 2

- Measure reforestation by number of planted trees surviving per year and number of hectares reforested.
- Tabulate number of farmers and hectares of land converted from slash and burn or pasture in this area to reforested area each year.

Goal 3: Increase local participation, investment and capacity to manage and protect watersheds in a transparent manner by 50% in collaborating communities.

Objective 3A: Water Board meets quarterly to update community on project progress

Objective 3B: Increase and improve the collection of monthly payments.

Objective 3C: Compile monthly financial reports and make them public to the larger community.

Objective 3D: Ensure a complete and consistent board of directors.

Objective 3E: Train the Water Board on management of funds.

Objective 3F: Ensure one staff person (plumber) and appropriate oversight and management of this position.

Evaluation of Goal 3

- Measure financial literacy and transparency through accuracy and frequency of financial reports, number of community members sign-off on reports and community knowledge.
- Conduct pre and post tests to measure change in knowledge from trainings.
- Measure investment and participation by number of households that attend monthly community meetings, the percentage of community members donating labor, and the value of donated services to the project.

Collaborators. Collaborators with Un Mundo on the water project are: Engineers without Borders and Duke University Engineers for International Development – land and water studies. SANAA – Honduran National Water Institute. Provide consulting, training and materials to water boards. Nombre de Dios National Park Foundation – have helped water board around preservation efforts around water source and incorporation efforts.