Drinking Water, Sanitation, Hygiene and Reforestation for the Community of Los Rodriguez, Nicaragua

Organization: Agua Para La Vida
2311 Webster Street
Berkeley, CA 94705
Phone: 510-643-8003
www.aplv.org
Duration: 6 months
Start/End dates: August 2008 through January 2009
Amount Requested: $ 12,000
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Executive Summary

This project will enable the village of Los Rodriguez, Nicaragua to build a community drinking water system, improve sanitation, educate community members about health and hygiene, and protect their community watershed from deforestation.

Los Rodriguez is located 45 kilometers down a gravel road from the town of Rio Blanco, Nicaragua, in the municipality of Paiwas, RAAS (South Atlantic Autonomous Region). Its 70 inhabitants are subsistence farmers who grow corn, beans, and raise livestock. They currently get their water from a combination of shallow, open wells and from the Tuma River that flows nearby. Both of these sources are highly contaminated. The village also lacks adequate latrines.

In 2007, the community sent a formal request for assistance to the Agua Para La Vida (APLV) office in Rio Blanco. Between September 2007 and April 2008, APLV staff made several visits and evaluated a spring 3.5km from the village that the members of the village had identified as a potential water source. The APLV team also evaluated the community's ability to organize themselves to carry out the project. The village has formed a Water Committee that will receive training throughout the project and will have long-term responsibility for the water system, and for collecting a small but important monthly fee from each household to cover the cost of maintaining the system over time.

The project consists of four elements: a gravity flow water system, latrines for each household, a community health education program, and a watershed conservation program. The integrated nature of the project will result in improved health (reduced diarrhea and dysentery and likely elimination of cholera) and an improved environment (reforestation). Students from our work-study technical training program will work on the project, gaining valuable experience in water projects.

The total cost of materials and transportation for the project is $24,113. An additional $9,072 of in-kind support (labor, accommodation, food and materials) will be provided by the community. We have a commitment for $10,000 from Rural Water Ventures and are requesting $12,000 from the Ann Campana Judge Foundation.
The remaining $2,113 will be provided by individual APLV donors.

El Naranjito, Las Mercedes, El Salvador: Water Quality and Supply Project

Engineers Without Borders, Oregon State University (EWB-OSU)
103 Memorial Union #262
Oregon State University
Corvallis, OR 97331
http://www.ewb-osu.org

Start and End Dates: June 2008 through June 2009
Amount Requested: $12,000

Principal Investigator: Aparna Shrivastava
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Executive Summary

The purpose of this proposal is to request funding for implementation of a sustainable water source development and water quality improvement project in the rural villages of Las Mercedes and El Naranjito, El Salvador. The Oregon State University's chapter of Engineers Without Borders (EWB-OSU) has been officially partnered with these communities since January of 2006.

The communities of Las Mercedes and El Naranjito are located in the northwestern part of El Salvador in the state of Ahuachapán (Figure 1). The communities are home to approximately 150 coffee-farming families whose homes are scattered across several mountain ridges. The communities have identified water quality and accessibility as problems, and have requested EWB-OSU's help to solve them.

Accessibility: There is sufficient water in natural springs, but community members have to hike great distances multiple times a day in order to obtain adequate water for their household needs. In addition the water table lowers throughout the dry season; this makes accessibility even more of a challenge for community members when springs close to their homes dry up. When the water recedes, it has to be retrieved from sources farther away. There is enough rainfall during the rainy season to sustain the community throughout the year, but they have no means of capturing that water for long-term storage.

Quality: The water quality of available water is poor because water is obtained from surface streams and open impoundments below springs. Water-borne diseases are common in surface water, and diarrhea is a common ailment. Children of the area frequently suffer from malnutrition brought on by diarrhea.

EWB-OSU has collected extensive baseline data about community geography, demographics, and health and has developed a plan that will provide clean, accessible water to all community members. Sustainability has been a key consideration in the project design; therefore our design calls for methods that deliver water passively, with no energy requirements. Additionally, our project will reduce the loads of phosphates and bleach that currently enter natural streams and degrade aquatic habitat. Finally, we strive to purchase almost all materials used in the project locally.

Our plan to improve water quality was first implemented in March of 2007. EWB-OSU facilitated the distribution of approximately 50 point-of-use filtration units made locally by a NGO called Potters for Peace. Subsequent distributions of the filters have been arranged by the Peace Corps volunteer stationed in the communities and our goal is to supply one filter to each family.

To decrease the time and effort spent collecting water, we plan to deliver water to all community households through a combination of sustainable engineering solutions. Homes that are located down-gradient from springs will be served by gravity-fed water delivery systems while homes located higher on the ridge tops will receive rainwater catchment systems and storage tanks. Wash stations will be constructed close to water storage tanks so that people can do laundry outside of streams which will improve downstream water quality.

Honduras Rehabilitation Well Projects

Organization: Living Water International
P.O. Box 35496
Houston, TX 77235-5496
Phone: 281-207-7800
www.water.cc
Duration: 6 months
Start/End dates: September 2008 to March 2009
Amount Requested: $ 12,000
Office Contact: Patricia Patyrak
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Executive Summary

The LWI Pump Repair Program has been established to meet the needs of communities who have wells that had once provided fresh potable water but are no longer functioning. There are thousands of wells around the world that have the ability to provide clean water through a simple procedure such as chlorination or the installation of a new hand pump, cylinder or pipe. More than 40% of the world's population lacks access to basic sanitation and more than 1 billion people are still using unsafe sources of drinking water. Our vision is to work with and train nationals to maintain and repair the wells in their own countries. It is more cost effective to utilize and repair a broken well than it is to drill and install a new well at a much higher cost.

Living Water International is requesting $12,000 from the Ann Campana Judge Foundation for the rehabilitation of 6 wells in Honduras. The cost of a new hand pump, cylinder, galvanized pipe, pump rod and hardware is $2,000 per well. This project will respond to the needs of six communities in Honduras who are drinking from contaminated rivers because the wells are broken. It is estimated that 80 percent of the illnesses in Honduras are water related.

LWI Honduras has a trained national team that makes 4-5 trips into several communities at the beginning of the year to survey the water sources being used. The LWI Honduras team works with the local community to establish relationships through follow ups and training on the proper maintenance of the well. In Honduras, women and children have the primary responsibility to collect water for their families. Therefore, the LWI team will also work with the women in the community to promote basic sanitation and hygiene principles to pass on to the household and thereby reducing water borne illnesses.

Living Water International monitors and evaluates the project's achievements by the successful completed project. Well reports are submitted by the field office to the LWI corporate office in Houston, Texas.

Potable Water System for Quisayá, San José Poaquil, Guatemala

Organization: PAVA Foundation
123 W. Berger Street
Santa Fe, New Mexico 87505-2615
Phone: (626) 485-0022 E-Mail: pavaamigos@aol.com
http://www.pavafoundation.org
Amount requested: $12,000 Amount granted:
Start/End Dates: June 1, 2008 - September 31, 2008
Contact Person: Hugo Higueros, Project Director
pavadireccion@gmail.com
USA Contact Person: Chris Benafel, President
benfellow@aol.com

Executive Summary

The proposed water project responds to a request made to PAVA from the agricultural community of Quisayáy in the municipality of San José Poaquíl, Guatemala. This project will provide potable water to 66 families (396 beneficiaries) and to a school from a preexisting spring located about three hundred meters distance from the community, enabling beneficiary families to share in the health benefits of non-contaminated water for drinking, cooking and hygiene.

PAVA (Programa de Ayuda a los Vecinos del Altiplano/Aid Program for Highland Communities) has a 24-year history of partnerships with small communities in the Guatemalan highlands. PAVA undertakes projects that are proposed by communities in the Department of Chimaltenango, working in collaboration with local and municipal resources. PAVA strives to be responsive to the requested needs of these communities rather than mandate particular types of development projects.

Since the 1990's, PAVA Foundation has worked with the village of Quisayá, most recently by supporting the introduction of Onil stoves, beehives, and tilapia fish tanks. In order to implement and oversee this proposed potable water project, the community has established a local committee. Local residents will donate manual labor for the project, meals and housing for a skilled labor crew, and some materials. The Municipality of Poaquíl will provide transport of construction materials, sand and gravel for construction, all funds for skilled labor, and donations of expertise from their office of municipal planning. In addition to project oversight by local PAVA Guatemala staff, U.S. engineers volunteering on behalf of PAVA will donate their design and support expertise. U.S. Peace Corps Volunteers have assisted with successful potable water projects for PAVA for the past nine years and will continue to provide assistance and supervision toward completion of this project.

PAVA requests $12,000 from the Ann Campana Judge Foundation to cover costs not met by unrestricted funds of the PAVA Foundation. The cost of materials for the complete system will total about $26,00,000. The value of donated materials, and volunteer and paid labor of the local community is estimated at $5,333 (a valuation which reflects the low prevailing wages of rural Guatemalan *campesinos*, and which the town itself establishes). The value of materials and transport provided by the municipality are estimated by the municipality at $4,667. This project will provide a key means to vastly improve health and hygiene for the residents of this poor, agricultural community. Potable water delivery, in combination with focus on hygiene and sanitation, has the potential to significantly decrease the infant mortality rate, the incidence of illness, and increase the life expectancy of the residents of this Guatemalan highlands village.

Payacuca, Nicaragua: Spring-Fed Water System

Organization: El Porvenir
http:/www.elporvenir.org

Managua, Nicaragua
US Address: 1420 Ogden Street, #204,
Denver, CO, 80218

Start and End Dates: November, 2008 – June, 2009
Amount Requested: $11,990

Project Director: Cesar Enoc del Castillo Espinoza
Tel: 011 505 268 5781 (Nicaragua) or 1-713-568-9189 (USA)
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Email: porvenir@turbonett.com.ni

Executive Summary

The proposed work in Payacuca, Nicaragua, will enable this rural village to create a water delivery system that will bring clean drinking water to their homes, improve sanitation, inculcate community health and hygiene practices, and initiate the community watershed protection through reforestation. ACJF funding specifically provides the materials and technical expertise so the community can undertake a major challenge they envision: pumping fresh water from their low-lying springs to a holding box and from there--*miracle*!--distributing it directly to spigots at their own homes.

Families in Payacuca now struggle to obtain water, the women lugging heavy water buckets for drinking, cooking and washing uphill, a chore taking as long as two hours each day. Payacuca is an isolated village of 145 families within the very poor municipality of Terrabona, 58 km southeast of Ciudad Dario. The water the women are carrying from the wells and water holes is not fit for human consumption. The water sources are not protected from contamination and often have no water in the dry season. Their latrines are inadequate and further pollute their environment. The community, especially the children, suffer from ill health due to water-borne and insect-borne diseases.

The people of this village are acting to make this dream bringing clean water to their families a reality. They have the ground water source and the electricity to pump it uphill. They have formed a water committee, petitioned El Porvenir. They are willing to do the work. What these subsistence farmers lack are the funds for the materials—concrete, pump, PVC pipe, hardware—and the technical expertise to install the system.

A $11,990 investment in materials and El Porvenir expertise will reap significant long term benefits in health, quality of life and community pride for the entire Payacuca population of 1160.