

Purified Water and Savings Group in El Coyal, Jutiapa, Guatemala

The geographical locale of this project is the rural area of southeast Guatemala. According to UNICEF, about 22% of the population of Guatemala does not have access to improved water sanitation facilities. The National Institute of Statistics stated that there are 49 water treatment plants; 26 of these supply water to the rural areas of the country, and of these only 15 are working properly. My proposed Project for Peace will take place in the community of el Coyal, located in the Department of Jutiapa. The community has 35 families, the majority of which live under the international poverty line of \$2.00 USD/day. Living under these conditions, families do not have immediate access to health services, secondary education, or potable water. Water comes to el Coyal under unique circumstances. The community has implemented a water carrying system made of polyvinyl chloride plastic to transport water from a nearby river to their household taps. Unfortunately, the water supply for the town is polluted because it comes from a natural spring that passes through other communities where it is used to wash clothing and carry garbage away before arriving in el Coyal. Additionally, during the rainy season, the water also carries mud and other contaminants. The community has been previously instructed in the importance and benefits of potable water and purifying methods such as boiling water and the use of chlorine; however, these options consume a lot of energy and change the taste of water so that the residents of the town choose not to purify the water. Those who drink non-treated water are susceptible to serious waterborne-illnesses such as cholera. Many people do not perceive water as essential, and instead they spend large portions of their limited incomes buying soft drinks and sweetened coffee for daily consumption, which has subsequently contributed to the high incidence of diabetes in the population.

Proposal

This Project for Peace seeks to create a sustainable supply of clean drinking water and awareness about the health benefits of potable water to the village population of el Coyal. The project will be carried out with the support of *Soluciones Comunitarias* (SolCom) and Community Enterprise Solutions since I have previously worked with these organizations. SolCom provides access to drinking water in rural communities through the distribution of water filters. The water filters utilize carbon filtering to remove contaminants and impurities using chemical adsorption as opposed to chlorine. The devices are portable and made of a durable plastic weighing about 5 pounds each and can be placed anywhere in the household. The filter has a filtering capacity of 19 liters per day and an integrated water dispenser which reduces external pollution when obtaining the filtered water. The filter has two containers – one is filled with polluted water and allows the passage of water to the second container through the carbon-activated filter device known as a “*candela*”. The filter can effectively purify extremely polluted water from the river during the rainy season as well. The result is potable water without the taste of chlorinated water or high energy consumption from boiling water.

Objectives of the Project

- To promote the importance of the creation and utilization of sustainable clean water supplies in the community as well as to teach inhabitants how to use the filters and why.
- To build and install sustainable water supplies using filters and a rain-water-collection device.
- To create and provide pedagogical and visual materials that can be distributed in the town’s school and church, and promote the usage of potable water for future generations.
- To provide a social network, build social capital of participants, and develop strong saving habits.

Summary of the project (May 25th – July 15th)

The project will consist of two stages. The first will take place with the support of SolCom and using my experience as a facilitator of community interaction in other Guatemalan towns. I will create and improve a series of educational workshops from SolCom that have successfully worked in other rural areas. The objective of these information sessions will be to raise awareness about the importance of potable water. I will prepare customized workshops aimed at different groups in the community: women, men and children. The workshops will be focused on proper hygiene, healthy cooking using filtered water, and promoting the substitution of soda and sugar-sweetened drinks with water in order to reduce the incidences of diabetes. In addition, I will utilize my skills in visual design to create visual and culturally appropriate publicity materials. These materials will deliver messages about the importance of drinking purified water to the residents, literate and illiterate alike, and pass knowledge along to younger generations. These materials will include water bottles, flyers, posters, stickers, and flipbooks. Materials will be housed in the school and church of the town allowing for easy access and distribution. In addition, I will organize three community-wide events: two soccer matches with local teams and one community dance in which I will dispense purified water from the filter system and promote the usage of purified water by giving away “promotional” materials.

The second stage will entail the distribution of water filters that have a lifetime of one year and the construction of a community water supply using a rain collection system at the community school. Every family in the town will receive a free filter unless they request not to. Those receiving filters will be encouraged to attend educational workshops and join a savings group. I will organize workshops in which I will explain to the town’s residents how to use the filter and how it works. Unlike some cases in which donated filters are distributed without background instruction or filter replacements, el Coyol’s families will have access to this information and future “*candela*” replacements for the filters through *Soluciones Comunitarias*. Those who receive a filter will be expected to join a community savings group. I will create a monetary fund to be utilized to purchase another filter for an extra year of usage and will be given to the savings group. These funds will increase through two yearly contributions of Q125 (\$ 16USD) from each member due at the end of each harvesting season in February and August, when families have the greater incomes throughout the year. The membership to the savings group will be a savings mechanism that will allow each family to put money aside to purchase a new filter replacement every year. There is an already-existing money recollection structure in this town, so it will not be a foreign concept. The community leader already collects and stores monetary contributions from each family to cover the expenses of the local church and school. Thus, this community leader will also be the point-person for the savings group and responsible for collecting the money and purchasing the filter replacement every year. Each family is also contributing an extra Q 25 (\$3.22USD) every year to increase the fund to acquire filters for new families and cover the transactions costs of getting the filter replacement every year, such as phone calls and transportation of the replacements. The savings group will meet every two months to learn about the funds and raise inquiries about the filters. It is important that communities realize that they can bring change to themselves by effectively using the resources that they already own. This community development project will be enhanced by constructing a sealed community water supply in the school that recycles and filters rain water during the rainy season when the springs are polluted. The filter device for this container needs to be replaced every 5 years. The replacement for this filter will be acquired using the funds that I provided to the savings group. I will follow up during the first 3 months with the users of filters and the community leader to find out whether their filters are working properly or not. I will also provide supervision and money management training to the community leader during the project.

Expected results

- This project aims to reduce the proliferation of waterborne illnesses and diabetes in el Coyol. Thus there will be an improvement in the standards of life for future generations in the town.
- As individuals in el Coyol realize that they can bring change to their community by utilizing their resources better, they will implement a monetary-savings and educational system to provide a sustainable provision of drinking water for future generations.