

Purpose:

To provide a water source for the residents of Cuernavaca, Morelos Mexico to help restore a sense of security to the community. We will provide a sustainable process to harness clean water by providing families and children with custom-built water harvesting systems that have built-in filters. The environmentally friendly filter made with Sand, Activated Charcoal, Gravel, and Coconut Husks will filter water from irrigation systems and rain.

Background:

In the rural and low-income areas of Morelos, residents have suffered from water contamination following the 2017 Earthquake. The lack of safe water has affected children's lives at home and restricted some children's access to education— impacting children whose families cannot afford bottled water. This limits their ability to attend both school and after-school programs essential for development. We are dedicated to Davis Projects for Peace's value to encourage peace through this grassroots project. We believe that peace begins within a child's daily environment at home and at school. We want to preserve the children's world of innocence in which they do not need to worry about the consequences of drinking unsafe water. Peace cannot coexist with dehydration, water contamination, and a lack of education. By providing rain barrels and self-irrigating gardens to families in need, we are taking the necessary steps forward to provide safe water and restore peace within the community and within the individual.

Project Overview:

The funding provided by the Davis' Projects for Peace will promote peace in the Cuernavaca region of Morelos by providing families with access to clean, safe water at home. We will be working with Dr. Hilda Rangel, who is leading a data-collection survey for the purpose of analyzing the effects of the 7.1 magnitude earthquake on the community's water sources. She has a comparative advantage through her personal knowledge of the livelihood of the people in that community. We will also be collaborating with local organizations, such as Casitas Inc., which focuses on providing healthcare and potable water to rural communities in need.

Implementation:

To ensure a smooth process, two students whose main task is to build the rain barrels will arrive in Cuernavaca the week of May 12th. They will reside with family members of Carolina Guadarrama free of charge, which is a 10-minute commute to the community in need. The students will organize the production of the rain barrels with EBM Work River, a blow molding company in the area. EBM Work River will build on locale, purchase materials for rain barrels as needed and organize the shipping and pick up. The installation will be conducted by volunteers, who will work free of charge and 1-2 professional contractors for the cost of 400 pesos/person/day. We will begin community education for recipients on the uses of the dual-rain barrel system through demonstrations on a small prototype through seminars and written/drawn materials. The remaining members will arrive Mid-June to implement the building of community gardens where the rain barrels will be installed by the last week of June. We will stay in the country to ensure a successful installation and maintain the proper use of systems. We plan to make the rain barrel design available to others to encourage the community to develop these assets after the initial project has been completed. The rain barrels will be placed on a flat concrete surface and made of environmentally friendly BPA free material. The filtration system will be environmentally sustainable, weather-resistant, and collapsible to allow for easy transport and storage.

Budget:

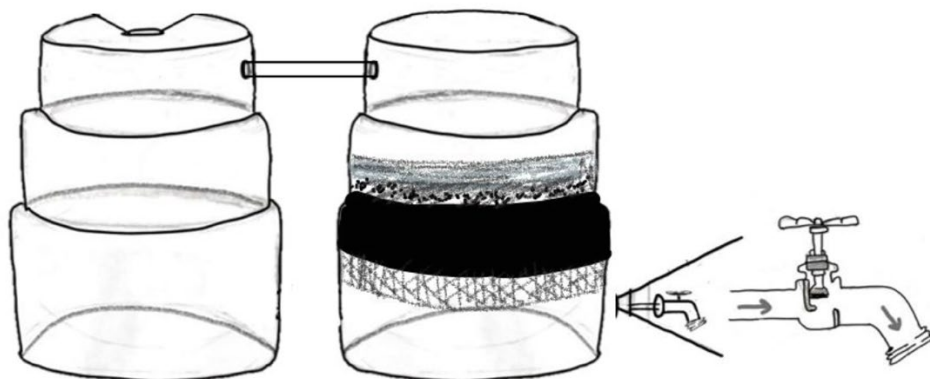
The students have agreed that any volunteer work will be unpaid. Equipment to provide a dual-rain barrel system with a filter to five qualified families will cost \$7,120.00, including paid labor. To qualify for the product, families must present a strong financial need, have school-aged children, and agree to the installment of a rain barrel and community garden at their homes.

Expected Outcome:

This region of Mexico has experienced non-potable water due to limited government funding. Many schools are debilitated, and the students do not have an environment that is conducive to learning. By providing safe water at home and supporting community gardens with irrigation systems, we will be able to provide a more stable future for children and their families. We are aware that a plethora of factors can affect the successful implementation of the project. We are prepared to be flexible in the schedule and extend our time in Mexico if need be.

Timeline:

March – April 2019	Organize plans
Week of May 11	Two students depart for Mexico
May 18- June 8	Build rain barrels, educate the community on usage and germ-related activities in schools
June 9- June 15	The remaining 2 students arrive. Build community gardens and campaign to inform surrounding communities about the project
June 17 - June 22	Monitor progress of manufacturing and community garden
June 23- June 29	Begin building rain barrels at the homes of recipients implement community outreach and educational programs.
June -June 29	Continue to revisit homes to assure correct use of rain barrels
July 1 – July 13	Monitor and evaluate the progress of the project



Meet Our Team:

Karla Figueroa is a double major in Economics (focus on finance) and International Relations, with a minor in Russian. In High school, Karla piloted the Kids in Conservation Program at the Lake Villa Public Library. A native of Mexico, she is fluent in Spanish. After beginning the NibiPure effort with team member, Sima, she has compiled extensive research on the water crisis in Puerto Rico and Mexico. Karla looks forward to continuing her efforts to provide communities with safe water through sustainable and environmentally-conscious efforts.

Elida Gonzalez is a senior double major in Economics (with a focus in Finance) and French, with a minor in International Relations. She recently completed an internship in Paris, France with a social entrepreneurship non-profit organization, YES Akademia. She recruited members to help communities in low-income countries (ex. Nicaragua, Dominican Republic, Senegal). She has been working at the local Boys and Girls Club, a non-profit organization for 4-years. She is fluent in Spanish and advanced in French. She resided in Mexico many years and knows the importance of helping people get basic needs, like clean water.

Carolina Guadarrama was born and raised in Mexico. She moved to the United States when she was 15 years old. She's been working in Mexico with non-profit organizations fighting hunger. It is important to her to help developing communities in Mexico because she knows what it is like to grow up in that kind of environment. She is a Spanish and Entrepreneur Major at Lake Forest College. Through her college experience, she has gained skills such as leadership, problem solving and teamwork. Which she believes is the key to transform the lives of many people in other countries

Fatemeh "Sima" Riahi is a senior majoring in Biology with a Minor in Chemistry. Born in Iran and raised in the United States and Canada, she is fluent in Farsi and French. She founded NibiPure with her partner Karla Figueroa to provide safe water to communities in need and won best social venture in the Pitch It! competition. She holds certifications from the American Management Association and is a member of the Future Founders residency program.