

Project Cost:

\$80,000

Chapter:

Chicagoland
Professional
Chapter

Water Distribution

Sustaining a Community

Armenta, Honduras



Background

The village of Armenta is located northwest of the City of San Pedro Sula in the foothills of the mountains that border the west side of San Pedro Sula.

This village has a water supply shortage that results in homes typically receiving water only one day a week. A 2006 report by the Public Health Center, indicted the water shortage seems to be due to an undersized conveyance line from the water catchment system to the 16,000 gallon storage tank.

The residents contribute 30 L (~\$1.60) per family per month to cover maintenance costs of the current distribution system. Unfortunately the community is unable to contribute additional funds towards the construction of upgrades to the system.



The Need

The village of Armenta has a water supply shortage that results in homes typically receiving water only one day a week. The water comes from a mountain stream that flows through the village. A water catchment system is located 1 ½ miles upstream of Armenta in the mountains. A 3" diameter pipe connects the water catchment system to a 16,000 gallon storage tank in Armenta.

The 16,000 gallon storage tank supplies water directly to one of the four neighborhoods of Armenta having 160 homes as well as to a second 12,000 gallon storage tank. The second storage tank supplies water to Armenta's remaining three neighborhoods that have a total of 190 homes. The current water distribution system has to deliver water to 350 homes containing approximately 4000 people.

Based on a 2006 report by the Public Health Center, the water shortage is due to an undersized conveyance line from the water catchment system to the 16,000 gallon storage tank. The report recommends that an additional pipe be added between the source and the tank to handle the demand.

The community of Armenta has requested the assistance of EWB to work with them to design and build the necessary upgrades to the water distribution system.

Engineers Without Borders™-USA (EWB-USA) supports community-driven development programs world-wide through the design and implementation of sustainable engineering projects while fostering responsible leadership.

For more information about this project, contact:
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or call Scott at (773) 693-9624

The EWB-USA Response

Members of Dayton Service Engineering Collective and EWB visited Armenta on August 12, 2011. While in the community DSCE/EWB was able to meet with Pastor Neptali and Armondo, the President of the Armenta Water Council and Village Vice President.

350 homes consisting of approximately 4000 people living near the water storage tanks will be directly affected by the water distribution enhancements. The village has grown substantially in recent years and is expected to more than double to 9000 people by 2013. This anticipated rapid growth means that a water distribution system upgrade is needed as soon as possible as the current water shortage will only get worse.

It is hoped that the water distribution system upgrade can be built in late 2011/ early 2012. Target dates are an assessment trip in the spring of 2012 and an implementation trip later in 2012. The EWB team is committed to do all they can to make this project a reality.

Moving Forward

Thru the assistance of Heart to Honduras, a local NGO, and Dayton Service Engineering Collective, the community of Armenta has eagerly agreed to volunteer all necessary manpower and gather and store materials. The community of Armenta is united in the hope of this project becoming a reality and eagerly anticipates EWB support.

