

EL OJOCHE RAIN WATER HARVESTING PROJECT



Carrying rocks for a water holding tank base

THE COMMUNITY:

El Ojoche is located 14 km north-east of Somotillo in the Department of Chinandega, 9 km east of the Nicaraguan-Honduran border. It is situated at the foot of hills which rise towards the Honduran border, west of the community. The population of the community is approximately 400, made up of 86 families living in 71 houses. There are two distinct sectors of the community, "La Plaza" where 40 families live and "La Escuela" where 46 families live.

El Ojoche is substantially an agricultural community. Each home site has a garden used to grow a corn/bean crop during the wet season to sustain the family.

THE NEED:

El Ojoche's location in mountain foothills results in two distinct weather periods. A five month "dry" season occurs from December through April. A "wet" season begins in May however the significant rains do not begin until June. By mid-October the rains begin to dissipate. Approximately 35 inches of precipitation fall during the "wet" period and supplies the village ample water to meet community needs for drinking, hygiene and agriculture. There is a small river that runs through the village which retains water only during the rainy season, e.g. it quickly becomes dry after the rainy period ends

Prior to the recent completion of two water holding tanks there were only three community water supplies consisting of a bore hole well (about 180 feet deep), some hand dug wells and a spring. Each of these water supplies is either run dry or severely constricted by the mid-point of the dry season. The village implements water rationing as a conservation measure however less water means poorer hygiene, an inability to grow a food crop and an increase in a variety of health issues, primarily in the under 10 years of age population.

While the "wet" season provides the opportunity for each home site to grow a food crop, the dry season is lost to such an opportunity due to the water constriction. This last year has witnessed a rampant increase in the cost of corn and beans, a staple of this village's food intake. Without the ability to grow a food crop during the dry season, food becomes rationed and under nourishment to malnourishment begins to take hold. Unfortunately children become the primary victims of this cycle whose roots lie within the lack of available water.

WHAT HAS BEEN DONE TO-DATE:

In August, 2008 the Albina Rotary Club Foundation provided funding to construct two water holding tanks. The water situation had grown quite desperate and the current wet season which was at its mid-point. In essence, the Albina Rotary Club Foundation funding was considered "emergency" funding. As such, there was not enough time to enlist other District 5100 Rotary clubs or apply for a Rotary International Foundation matching grant. The Albina Rotary Club Foundation funds were combined with other non-Rotary benefactors to construct two 18,500 gallon water holding tanks.

The two rain water holding tanks were completed in El Ojoche in August and September. The costs (\$11,179) were covered by the Albina Rotary Club Foundation (\$4,200) and a private benefactor. The tanks constructed provide each villager with a little more than ½ gallon of additional water each day during the dry season. As intended, the tanks supplement water from a bore hole well for drinking, cooking and hygiene during the five month dry season.



A start – one of two tanks constructed in August/September

It should be noted that the tanks were constructed by local labor, e.g. the villagers of El Ojoche. The tanks hold approximately 18,500 gallons of water which is collected as runoff from large roof areas such as the school or church. By having villagers participate in the construction and then trained on tank maintenance, the "ownership" mentality takes hold and hope returns.

THE NEED FOR ADDITIONAL WATER HARVESTING:

As previously mentioned, the two tanks constructed in 2008 provide each villager with a little more than ½ gallon of additional water each day during the dry season. While this is a great benefit to the village, it is difficult to imagine that so little additional water (1/2 gallon) can make a meaningful impact. But it does provide a beginning, hope and most importantly an opportunity to address an equally dire need.

Hunger remains a chronic problem in this village as crops can only be grown during the "wet" season. Many of the children in the community get only breakfast when food is scarce. Hunger of this magnitude is not only painful, it causes severe mental and health disorders as the brain, liver, kidneys and heart do not develop normally when there is severe hunger

The specific need we want to address with this project is to provide an increased water supply for El Ojoche so that the community can raise supplemental food crops to help alleviate hunger in the community during the dry season. Specifically the construction of two additional water holding tanks would supplement the original two tanks and allow the cultivation and harvesting of vegetable crops which currently can only be grown during the wet season. Additionally a water distribution and irrigation system would allow for managed water use by controlling the amount of water committed to irrigation. A drip irrigation system would distribute the precious water more evenly and efficiently to allow for maximum crop growth potential. Also plastic holding tanks for 20 homes not located near the village would provide much needed water for personal use and an additional crop growing opportunity.

THE ROTARY FOUNDATION AND DISTRICT 5100 MATCHING GRANTS

It is the intention of this proposal to gain project sponsorship by the Albina Rotary Club Foundation. In this role, the Albina club would solicit participation from other District 5100 clubs with an objective to have at least \$14,500 of the project cost covered if all three levels are to be achieved. Securing additional District 5100 club participation (or other Rotary clubs outside District 5100) is heavily contingent on application to The Rotary Foundation (TRF) for a matching grant.

In addition, a matching District 5100 Designated Grant of at least \$8,000 would need to be secured, again if all three levels are to be achieved. Since TRF will match \$.50 for every \$1 raised by the participating clubs and \$1 for every \$1 contributed through District designated grants, full funding of the project could be achieved.

We have already secured \$1000 from the West Salem Rotary Club.

HOST PARTNER:

The Albina Rotary Club Foundation emergency funding assistance of the two water holding tanks constructed in August/September was done through the Rotary Club of Leon, Nicaragua. Leon, the closest major City with a Rotary Club is located approximately 50 kilometers from El Ojoche. The Rotary Club of Leon, Nicaragua has agreed to act as the Host Partner for this project. The Rotary Club of Leon has acted as a Host Partner in prior TRF matching grant projects.

Included in their responsibilities as Host Partner, the Rotary Club of Leon will provide periodic site visits to insure the project is progressing as planned and provide for the overall administration of the project, including accounting and periodic and final project reporting.

COOPERATING ORGANIZATION:

We will be utilizing the services of a Non-governmental Organization (NGO) for this project. Food-for-the Hungry (FHI) has acted as the Cooperating Organization with a previous TRF Matching Grant project the Albina Rotary Club sponsored, e.g. the Peru water well project. FHI will coordinate the many moving pieces by engaging the Consultants and Engineers as well as material ordering and logistics. The success of this project is highly aligned with FHI's knowledge and experience in working in the remote villages such as El Ojoche.