

WORLDVIEW

Take Home Reading

During the rainy season water falls from the sky at no cost, so families can fill their containers with rainwater off rooftops. The roof serves as a sort of funnel with an attachment that pours into a container.



Honduras

Rainwater Harvesting: Green Gardens, Good Health and Sound Economics

Angelica Barahona wakes up around 6:30am. The Honduran sun is just starting to peak over the rolling hillsides and into the valley that is the capital city of Tegucigalpa. She slides out of the bed sheets, past her 1 and ½ year old brother, as quietly as possible so not to wake him, nor her 3 other sisters sound asleep on the bunk beds in this shared room. There are four beds and 5 children, and their parents have a separate room.

She quietly continues out of their bedroom, through the kitchen/common room and out the door. Once outside she takes a few moments to herself on the swing her father has designed off the branch of a mango tree, for she knows in a few minutes the house will come alive as she and her 6 other family members get ready for a new day. The three young girls will have to get dressed, eat and go to school, while

Carlos senior heads off to work as a mason in another community of the city. Their 30 year old mother, Yesenia, will prepare breakfast, organize her 3 school bound girls, wash and dress Carlitos, the youngest and only boy, and then wash and dress her little monkey, five year old Genesis.

The girls are in school from 8am until 1 in the afternoon. When Angie returns from school her older sister Estefania, age 14, will help Yesenia prepare lunch while Carla, age 9, will be in charge of cleaning up the house before lunch. Angie stations herself out back with the pila to begin washing clothing and leftover dishes, while at the same time watching over Carlitos and Genesis.

The pila, which is a cement container that holds about 6 barrels of water, was a donation to the Barahona family. The pila often serves as a kitchen sink or laundry board. Water is pulled out with a small bucket and poured over what is to be washed.



Rusty Barrels
Before families used to store water in rusty, corroded barrels which could cause the water to become contaminated, thus being a health hazard, but it was all they had. Now, as shown in the background 6

The pila project was introduced by the Falls Brook centre for its health implications and carbon-neutral technology capability. So, with collaboration from the Falls Brook Centre and the Honduran organization COHAPAZ, this pila allows the family to save rain-water in a container that won't rust or leak. In total they have built 185 pilas.

None of the families in Angelica's community, called Nueva España, have running water or toilets. Most houses are made of wood, without insulation and have tin roofs. Although this community overlooks the reservoir of water that serves most of the marginal communities surrounding Tegucigalpa, Honduras. The zone in which Nueva España is located has been deemed to 'risky' or dangerous to fit the piping for water. This obliges community members to pay private water companies approximately 20 Lempira

(Honduran currency) or about \$1 per barrel of water, a basic need. The pila project was introduced to address family situations like that of the Barahona family who live in peri-urban areas, without much money and minimal resources. The pila promotes rain-water harvesting using an appropriate technology that suits the needs of the beneficiaries. If there is a successful use of rain-water harvesting during the rainy seasons, family water costs can be significantly cut down. Consider that a family of four needs at least 1 barrel a day to live well, and 1 barrel cost 20 Lempira, or 600 Lempira monthly. In six months a family has saved 3600 Lempira (about \$275 which is a lot of money in Honduras). That is enough money to school 2 children for a year. With the ability to harvest rain-water families can improve sanitary conditions and practices and foster healthy lifestyles.



Water Distribution...

The pila is necessary for water storage as water may only be available and distributed through the communities once a week.

WORKING TOGETHER

Falls Brook Centre - COHAPAZ

“ That which we grow, we don't have to buy. So vegetables harvested are equal to money saved.”



The Barahona's, along with other pila recipients, have a garden beside their front door with 2 chili plants and some flowers. They also have a kitchen garden planted in

the backyard. It is about a meter long and half that in width. Angelica with the help of her little sister Carla, water it daily and weed it when necessary. They grow

cilantro, peppers, tomatoes and celery primarily, and also enjoy growing radishes, carrots and some lettuces. It is a relief to the family to have water to spare from the pila for watering the garden. As the saying goes in the communities of Tegucigalpa, vegetables harvested equal money saved. As the Falls Brook Centre - COHAPAZ built 185 pilas across the peri-urban communities of Tegucigalpa, this helped to start 185 vegetable gardens growing, so that at least 185 families of adults and children, will have increased their diet's nutritional value and are living healthier, fuller lives. It is a triple bonus; clean water, gardens, and health!

Discussion Questions

Curriculum Connection Environmental Science 122/123. Sustainable development Unit. World Issues 120. Players in the global community Unit.

1. How does rainwater harvesting helps to meet the water requirements of this particular population? Is this practice helping to fulfill other human needs?
2. What do you think is the reason this particular town has very little water?
3. Is water an abundant resource in your area? What are the patterns of use of this resource in your lifestyle? Do you think that water might be or become a scarce resource in your community? Why?
4. Reflect upon the technological aspect of the issue. Is it always necessary to use sophisticated technology to solve a problem? Are there any limits to science and technology to solve problems?
5. Identify the agents in the story (individuals, governments, international organizations), their specific roles and the concrete actions to help ease this water scarcity problem.

