



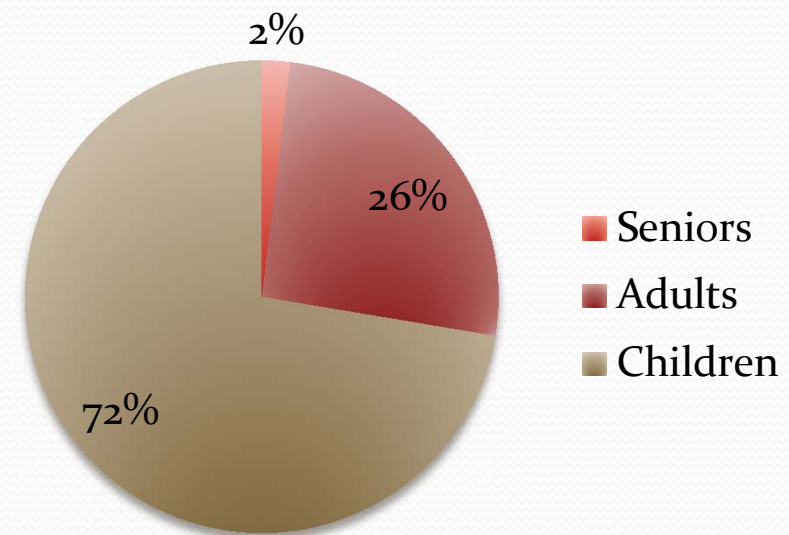
A Study of Patzará, San Antonio Ilotenango, Quiche, Guatemala

An Analysis of the pros and cons of a Mixed Potable Water System (Pumps/Gravity)

Demographics

- 71 families in the communities “Yat y Sion”
 - 56 families participated
- Statistics:
 - Average Number of Children: 5.28
 - Average Members in the Family: 7.43

Population Distribution



Demographics

- Income Statistics:
 - Average Daily Income: Q48.6
 - Estimated Number of Days worked per month: 6
 - Estimated Monthly Income: Q291.6



- Statistics refer only to men in the community



Demographics

- Statistics about water:
 - Average quantity of water used monthly per family before project implementation: 1,337 gallons
 - After implementation, each family had access to 3,150 gallons of water per month
 - Average monthly expense before implementation: Q339.50
 - This only reflects families that purchased water before the project. We do not have an estimate of the percentage of the population that bought water versus those that did not.
 - Average monthly expense after implementation: Q80.00
- Average Monthly Savings: Q259.50





Before the Potable water system:

- Long distance from water sources
 - The river is 15K from the village
- Limited Availability
 - Each family was allowed to use the well one hour per day
- It took a full day to wash clothing or bathe.
- Women had to take children and animals with them to the water sources
 - Risk of sickness due to the weather and other conditions

Before the Potable water system:

- They would fill 4 drums of water but only return with 3 ½ drums
 - Some water was lost in transit
- They were sick approximately 10 days per month
 - Skin Infections, colds, asthma, diarrhea
- Women and children bathe each 20 days
- In order to drink the water, it had to be boiled

Positive changes resulting from the Potable Water Project:

- They are better able to care for their children and their livestock.
 - Fewer illnesses, fewer doctor visits
 - Healthier animals get a better market price
- They are able to spend more time at home.
- Children are able to attend school more regularly.

Positive changes resulting from the Potable Water Project:

- Women have more time to contribute to earnings.
- A increase in the quantity of water has allowed them to improve their infrastructure (concrete floors, buildings, churches, health centers, etc.)
- A reduction in the conflicts between families over water.



New Concerns after the project:

- Possibility that the water will run out if the environment is not cared for.
- Possibility that the pump will not work if the equipment is not appropriately cared for
- Dependence on electric energy
- Change in prices of other items which influences the ability to pay for the water system

Other things to consider:

- Suggestions from the Patzala community for their system
 - Seek other options in case the pump breaks
 - Long Term Sustainability
- Potential for greater earnings: time and money
 - 0.536 hours per day = Q0.596 per day for the women
- External Expenses (Inflation, drought, increase in the price of food)
- Location (difficulties with the topography and the sources of water)
- Community division because of ideologies
 - Religion, culture, political parties

Final Report

- What will be included in the final report
 - Analysis of the case of Patzala
 - Statistics, detailed analysis, and recommendations
 - Announcements to share the concept of a water project
 - To be used in the communities that do not have a water system
 - A video that documents the changes in Patzala due to the water project