SAFE WATER REPORT 2019

This was a year of "sewing seeds" for CAPD and its Colombian partner FRPG (Fundacion Red Proyecto Gente). We expect some of these initiatives to bear fruit in 2020.

A number of Rotary Clubs have projects underway, financed by Rotary but using CAPD molds and benefitting from our training sessions. Rotarians continue to do excellent work in bringing safe water to rural households.

Because CAPD owns 40 molds in various parts of Colombia, we provided the steel molds to a number of projects and training sessions run by others in Quindío, Choco and Riohacha, la Guajira and Arcabuco, Boyacá and Tumaco, Nariño.

CAPD provided plastic filter bodies for a small demo project in Leticia, Amazonas implemented by Entropika. CAPD funded a pilot project using plastic filter bodies in Ricaurte, Cundinamarca (implemented by FRPG).

FRPG established 3 demo filters with a water system association in Restrepo, Valle de Cauca. We are sewing seeds and waiting for them to bear fruit.

CAPD and FRPG submitted proposals for co-financed pilot projects to Foundations connected to 2 large cement companies, an oil company and a development foundation. Time will tell.

CAPD and FRPG set up a display booth in a number of conferences related to safe water in rural areas. Thank you to Rotary Club of Nuevo Ibague and to CAWST for collaborating in this. Again, we made a number of connections with associations interested in projects.

CAPD and FRPG sponsored a couple training sessions for groups interested in co-financed pilot projects (Machetá, Cundinamarca and IMCA, Vale de Cauca and Alcala, Valle de Cauca) and follow up training for community promoters in Fonseca, la Guajira and Ibague, Tolima and Ipiales, Nariño).

The Reason for Household Water Treatment Systems

The reason why household water treatment and safe storage (HWTS) is one of CAPD's programs is presented below:

Colombia officially has 12,000 rural water associations and unofficially perhaps double that number. These associations find a water source, arrange with the landowner for access, install and maintain the piping to the homes and charge a monthly fee based on metered consumption. Mostly there is no treatment process included since capital cost and maintenance costs are too high for the small number of homes served.

If the water source is a spring, most of the contamination (biological) will occur within the piping and household storage facility. Homes may be without water for long periods of time when disputes arise with the landowner where the spring is located. A much too common occurrence.

If the water source is a stream or river, water quality is a bigger issue since it may be contaminated not only with biological contaminants but also with chemicals from agriculture or illegal mining operations. Additionally, this water will be highly turbid and especially so during the rainy season.

Families will pay a monthly fee based on consumption and are responsible for water treatment (removing turbidity, biological contaminants and chemical contaminants).

However, families living in flat areas have other challenges related to access and transport. In villages there may be enough organization and funds to drill a well and install and maintain an elevated tank and distribution system. Again, families will pay a monthly fee and have to treat the water themselves. With luck, the water will remain sweet and not turn brackish. A much too common occurrence.

When families do not have access to sweet water or if the population density is too low, there will be no rural water association looking after their needs and each family must find a source and organize transport of the water to their homes. Sources are usually surface sources so contamination will include bacteria, chemical contamination and turbidity. In some areas, the municipality will deliver water by tanker truck but frequency is insufficient and water quality is usually low.

The usual impacts of these complex situation are diarrhea and parasites particularly in the under 5 category. This is where HWTS based on a BioSand Filter comes into its own. For a one-time investment, the family can remove parasites, bacteria, viruses and turbidity from their water. The family has a vested interest to maintain their systems and with the long life span of the filter system enjoy many years of disease free living.

CAPD together with many collaborators and co-financiers has organized projects that have benefitted more than 7500 families in many zones of Colombia.

Submitted by Bob Wiens, Safe Water Program Director