India New England Newspaper
3/10/2006

Issue Date: March 1 to 15, 2006, Posted On: 3/10/2006

More than a drop in the bucket

CT couple implement tap water purification project in Kolar, India

By Uma Valluri

HAMDEN, Conn. — A husband and wife team are two crucial players overseeing a project in India from their Connecticut home. Every time they reach for a glass of water, their minds are transported to the Kolar district of Karnataka, India where they are ensuring safe and pure water for the local population.

Mike Lipman works at the Kolar, India site to manufacture water filters, which are used to provide safe drinking water to residents.

Certified public accountants, Mike Lipman and Cathy Forsberg launched a non-profit organization called South Asia Pure Water Initiative, Inc. in November 2005. As part of the initiative, they set up their first workshop in Kolar which manufactures filters that the local residents can use to purify water. “The filter does not require use of any chemicals, it is cost efficient and is low in maintenance,” Mike Lipman says. Essentially the filter is a bio-sand one, in that water percolates through sand and gravel — which contain biological materials that can leach out impurities from the water.

Having lived in the Kolar district for two years as an American Peace Corps volunteer 35 years ago, Lipman is fairly familiar with health and water problems in India. During that time Lipman ran a workshop to drill and blast wells and also drilled bore wells for drinking water.

“When I visited India after many years in 2004, I very upset,” Lipman says. He found that all the shallow wells that supply most households were dry, forcing people to rely on unsanitary water supplied by mobile tankers.

Lipman soon realized that he did not want to give up the fight to obtain clean water for local residents. So he researched water purification methods while working as an accountant in Connecticut. “I discovered an inexpensive and effective solution in the form of a bio-sand water filter devolved by a Canadian scientist,” he says. He attended a seminar in Calgary in Canada to learn the technique behind making the filters.

While Lipman worked on the details of the implementation of the filters, his wife, Cathy Forsberg, used her experience as a Rotarian to generate funds. Rotary International is a worldwide organization of business and professional leaders who provide humanitarian service and help promote peace.

A manufacturing facility in Kolar, India, makes water filters that are subsidized to the local residents. The plant also helps the local economy by providing jobs.

As a member and past president of the Rotary club of Hamden, Conn., Forsberg was very hopeful that she and her husband would find some money needed to implement their vision for clean water in Kolar. The couple applied for and received a grant from a private foundation in Greenwich, Conn. to start the water filter program.

Fortified with the grant money and their personal funds, the couple traveled to India in November 2005 to implement the project. Prior to their trip, Lipman and Forsberg contacted Rotary clubs in Bangalore, India. “They were very helpful and are invaluable to this project,” Forsberg says. “They helped us set up operations much quicker than we could have done on our own.”

Back in Kolar, the couple made presentations and spread the word about the water purification program. According to Lipman, even though there was some reluctance initially, residents soon came around. “People were happy that no chemicals were involved and water tasted very fresh,” Lipman says. He adds that boiling water is costly and time-consuming, tempting people to often eliminate the purifying process completely, leading to the spread of illness.

The Kolar Rotarians helped to establish a manufacturing site to make the filters. “Setting the units in India is also providing employment to local people who are compensated for their work,” Lipman says. “A program director volunteers time and is in constant touch with us.”

Lipman says that manufacturing the filters locally is efficient as the raw material is readily available. A concrete mold is an important component of the process and is used to create the bio-sand filter. The concrete mold is also being manufactured in Kolar. Once the filter mold is ready for use, water is poured on top of the filter, a diffuser plate allows for slow drain into a sand bed, water then passes through several layers of sand and gravel containing biological substances to help in the purification process. The final step is to collect the pure water that can last up to two weeks.

Lipman says the demand for molds has grown faster than the rate at which they can be manufactured locally, so they have bought more molds to make filters. Each mold can only produce one filter per day and the workshop currently has ten molds in use. Residents have access to one subsidized filter per household and are trained in its use. It is estimated one filter will last up to 25 to 30 years and it has been introduced in more than 30 countries around the world. The Conn. couple hope to start the project in other parts of India and perhaps other countries in the near future. It costs 21 dollars to manufacture one filter in the United States, though they are sold for only 13 dollars in India. “We are subsidizing the cost of the filters by soliciting contributions and conducting fund-raisers,” Lipman says. The short-term goal for the project is to place 15,000 water filters in South India over the next five years. “This would supply 225,000 people clean drinking water,” Lipman says. The couple plan to return to India in the summer and hope to expand the project by starting sanitation education programs for people who buy the filters.

For more information about the South Asia Pure Water Initiative, Inc., please contact Mike Lipman and Cathy Forsberg at Info@SAPWII.org.