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# SUCCESS STORY

## HYGIENE TRICKLES DOWN

### **Water Treatment Becomes Part of Remote Village's Environmental Movement**



[Photos: A. Shrestha (AED)]

*Shree Primary School participated in the Nepal Hygiene Improvement Project study of high-yield water treatment options in schools.*

Nestled in the hills above the beautiful Dang Valley lies Ghoddhaura, a remote village in western Nepal; its nearest neighbor, Ghorahi Municipality, is a 5 kilometer hike away.

It took years of lobbying before villagers succeeded in opening a primary school for their children. Shree Primary educates 101 students of mixed ethnic heritage, including the Dalit minority, and its stone and woodwork building is in desperate need of renovation. Because of the small number of students enrolled, the government supports the school only up to grade four. If students want to continue their education, they have to walk downhill for an hour and a half and cross a river, which floods annually, to attend higher grades at another school, a significant burden for students at such an age. Similarly, all villagers who need to supplement their agricultural subsistence must walk for at least an hour and a half for food and other supplies.

### **Community Hygiene and Environment Improvement**

Despite these challenges, the community convinced UNICEF to build toilets at the school for students and teachers. Teachers, villagers, and students carried the sacks of sand, cement, and bricks to the school from the base of the hill to ensure the toilet construction succeeded. Students and caretakers oversee their maintenance. Learning about this outcome, the Nepal Hygiene Improvement Project (NHIP) selected this school to participate in its school point-of-use pilot study conducted in early 2008. NHIP is a collaborative effort between UNICEF and the government of Nepal to improve hygiene practices, particularly water treatment and hand washing, with USAID's Hygiene Improvement Project providing targeted technical assistance.

An uphill spring provides a regular water supply to the school through a tap located in a designated drinking water room. To address the issue of bacterial contamination, NHIP installed three clay colloidal silver (CS) filters at the school as part of the study. The students and teachers received an orientation on use and maintenance of the filters along with basic hygiene and sanitation training on such topics as hand washing with soap, use of toilets, and other hygienic behaviors that they need to practice at school and their homes.



*Part of the village's environmental focus is on sanitation improvement. Household latrines like this one are made of bamboo.*

A month after installation, the NHIP team checked in on the school to assess the efficiency of the filter and its maintenance; the findings were positive. The team returned again after six months to see if the filter was being properly and consistently used and to observe if the safe water and hand washing messages had trickled down to the village level from the schools. The filters were intact and being used regularly. At the community level, the research team observed households using technologies like solar disinfection and boiling to treat water.

“We have been very lucky to get support from UNICEF, Water Supply and Sanitation Sub-Divisional Office [WSSSDO], Dang, and the Nepal Hygiene Improvement Project that has guided us to healthy life,” said the Chairperson of the School Management Committee Baburam Mahara. These days the

village does not have any waterborne disease such as diarrhea or cholera that used to occur on a regular basis. Chet Bahadur Nagarkatti, a member of the School Management Committee said, “If a household has a member suffering from such diseases,... it is the obvious reason of not following basic hygiene practices.”

Mr. Nagarkatti and members of the Village Committee have spearheaded a separate environmental initiative to benefit households—technical assistance to improve stoves. Thus a movement to have safe drinking water, a toilet, and an improved stove has now become a must for every household in the village. “A household will be socially rejected if it does not have all three facilities,” Mr. Nagarkatti said.

Households use available resources to build toilets, receive technical support from two trained village technicians to construct improved stoves, and practice either SODIS or boiling to treat water. The school's child club Chairperson Puja Thapa, a grade three teacher, said that the club, “... has been very active in informing and educating members of the households about the safe drinking water and hand washing practices in the tap stands from where villagers get their water.” According to Tel Bahadur, the WSSSDO Engineer and technician in charge, “Hygiene defines an individual's personality that helps him to be a respectable and responsible citizen of the society.”

The Village Committee chairperson and the school principal are determined to mobilize the entire village to become open defecation free with a toilet in every household together with safe drinking water facilities and improved stoves. Their determination to achieve this goal in a relatively short time puts them in healthy competition with other villages attempting to make these improvements.

For additional information: <http://www.hip.watsan.net/page/251>



*Colloidal silver filters placed in the primary school to treat water functioned well throughout the NHIP survey.*