

## Community Water Project in Canlubang, Philippines

Baxter's manufacturing facility in Canlubang, Philippines, built in 1991, produces containers of solutions for peritoneal dialysis and hemodialysis for the region. Water is a key input for these products and also a precious resource in the area, defined as a "water-scarce region" by the World Business Council for Sustainable Development. Therefore, preserving water resources and increasing access to water are not just priorities for Baxter, but for this site as well.

In 2012, Baxter launched a project with Philippine Center for Water and Sanitation (PCWS) to improve the water, sanitation and hygiene (WASH) conditions for the nearly 1,500 inhabitants of Sitio Silangan, a community within walking distance of the company's facility. PCWS builds the capabilities of communities, households, non-governmental organizations (NGOs) and other groups to address WASH challenges throughout the country. Volunteers from the Baxter plant, which employs about 200 employees, actively support this initiative.

The project's main objectives include:

- Introducing long-term potable water sources to Sitio Silangan;
- Raising awareness about low-cost water supply, sanitation and hygiene technologies for households and the community that enhance human health, community empowerment and environmental protection;
- Implementing and providing hands-on training on several such technologies; and
- Building the community's capability to sustainably manage its water supply and sanitation systems.

During the final two months of 2012, PCWS and six volunteers from Baxter met with community members to assess the water and sanitation needs of Sitio Silangan, define the roles of project participants, and prepare community members for the project.

PCWS then led a two-day water and sanitation resources inventory and assessment, attended by about 50 community members. Each of six groups drew a water and sanitation map of their locality, indicating the locations of water sources, households, toilets, drainage systems, roads, animal housing areas, public areas, landmarks, creeks and other relevant features. The groups then walked through the community to fine-tune their maps and gather additional input from other residents.

Several key findings from this assessment have informed the rest of the project:

- **Access to water** - Most households have relatively easy access to hand pump wells. However, most of those wells, both communal and household-owned, produce non-potable water that is iron-laden, turbid, foul smelling and poor tasting.
- **Potable water** - In the entire community, only seven hand pumps yield potable water. As a result, most households either buy drinking water or collect potable water from near the gate of the Baxter facility.
- **Waste and wastewater** - Drainage usually leads to the creek, which is the depository of various wastes, including wastewater and toilet wastes from houses located along its banks. The septic tanks in Sitio Silangan have unlined bottoms, so the soil absorbs related waste and wastewater.

To address these needs, the focus of the project then shifted to low-cost water supply and sanitation technologies. PCWS experts described numerous options, and project participants identified four as the most appropriate for the community.

## WASH Technologies Selected for the Project



During the first few months of 2013, PCWS supplied the needed materials that Baxter helped finance, and trained community members to build, operate, maintain and repair pilot demonstration units of two iron removal filters, 40 biosand filters, three biogas digester septic tanks and two rainwater harvesting tanks. The team situated these units close to community members who have the least financial resources, are most impacted by water scarcity and lack of access to potable water, and lack safe and adequate sanitation facilities.

Community members, Baxter employees and PCWS commemorated the launch of these pilot units at the "First Drop of Water" celebration during the annual fiesta of Sitio Silangan in March 2013. Using these technologies, community residents are increasingly meeting their daily needs for potable and non-potable water.



Participants at the "First Drop of Water" celebration. Photo Credit: Philippine Center for Water and Sanitation

## Project Sustainability

To maintain initiatives started by the Baxter-PCWS partnership, the Sitio Silangan community formed a water and sanitation association (WSA). Officers have gained expertise in the WASH technologies selected by the community, and a Baxter employee who is also a resident of Sitio Silangan serves as the WSA Secretary.

Ongoing education is essential to ensure broad engagement throughout the community. One aspect covered by the WSA action plan is raising awareness about the benefits of WASH technologies. WSA members meet weekly to share information with community members, targeting the neediest who have the greatest potential to benefit.

The close involvement of community members throughout the initiative has been a key focus, and many now have the skills to help develop and disseminate WASH technologies more broadly. Residents whose households received these technologies participate in educational initiatives.

In May 2013, community members along with five Baxter employees from the Canlubang plant attended training focused on operating and maintaining WASH technologies. Additional sessions are planned for the coming year, including a unit focused on monitoring and evaluation. The plan is for each household with WASH technologies to monitor efficiency and performance, and in coordination with PCWS, for the WSA to conduct regular water quality testing on biosand filters.

Another training session will provide guidance on how participants can document and share their experiences during seminars and conferences.

Due partly to these efforts, a growing number of people in Sitio Silangan have expressed a desire for WASH technologies. The project team expects that more rainwater harvesting tanks will be built in Sitio Silangan in time for the rainy season.

The WSA action plan also targets collaboration with learning institutions, NGOs and other communities, to deepen local knowledge while sharing experience and skills.

In May 2013, PCWS brought five people from the French NGO Eau et Vie Philippines (Water and Life Philippines), which runs community projects in Cavite and Cebu, to Sitio Silangan. The WSA shared with the visiting delegation details on ways the project and community members selected and implemented WASH technologies, and then provided a tour to show the benefits firsthand.

Eau et Vie Philippines also invited the Sitio Silangan WSA to its project site in Cavite, where it is planning a sanitation project in partnership with PCWS. This connection should help the Sitio Silangan WSA to learn more about low-cost wastewater treatment for households and the community.

In August 2013, WSA members plan to attend the [Sustainable Shared Growth Conference](#) at the University of the Philippines, and present a paper about their experience in Sitio Silangan.

## Other Initiatives

In early 2013, Baxter also entered into a partnership with Sarar Transformación SC to implement a community water project near Baxter's facility in Cuernavaca, Mexico. The project's goals are to improve water and sanitary conditions at local schools in the surrounding water-stressed area of Tepoztlán, Mexico; to educate the community on sustainable water use; and to implement processes to ensure maintenance of the installed improvements. Nearly 1,000 residents of the Tepoztlán area are expected to benefit from this project.