MEDOR'S ARBOR-LOO PROGRAM

The arbor-loo program is an essential part of both St. Joseph's and OLQP's work to improve health and sanitation in the vast parish.

Need. According to the Centers for Disease Control, "An estimated 2.5 billion people — half of the developing world — lack access to adequate sanitation. Eighty-eight percent of deaths due to diarrheal illness worldwide are attributable to unsafe water, inadequate sanitation, and poor hygiene. These diarrheal diseases (such as cholera) kill more children than AIDS, malaria, and measles combined, making diarrheal disease a leading cause of death among children under five." Further, according to The World Bank, as of 2015, only 24 percent of Haitians had access to a toilet. Out of 128 countries studied by the World Health Organization, Haiti ranks 98th for sanitary conditions.

Open-air defecation is widespread in rural Haiti, including in St. Joseph parish, and this adversely affects the water supply and people's health. Few rural families have a latrine. The cholera epidemic after the 2010 earthquake began in the Artibonite Department, where Medor is located, and hit the parish hard. Many became ill, dozens died. Subsequently, government agencies, non-profits, and clinics throughout Haiti focused on educating people about hygiene and working to improve water and sanitation conditions. Sustainable Organic Integrated Livelihoods (SOIL), a non-profit working in Haiti, recommended using arbor-loos, a household latrine, for rural areas. The arbor-loos are adoptable by rural families, enabling them to install a latrine that at the same time improved soil and water quality. Catholic Relief Services previously installed many arbor-loos in Africa.

History. Like other programs, the in-home sanitation program developed over time. Sue Carlson, leader of the OLQP Haiti Committee, first heard about SOIL from a Haiti Committee member in 2007, and met with Sasha Cohen, its co-founder. Later that year, a SOIL sanitary technician visited Medor to discuss ecological toilets and arbor-loos with Père Leroy, the pastor of St. Joseph at the time. He built an ecological toilet near the church. After the 2010 earthquake, SOIL was in great demand and could not carry out a grant received in 2011 from the International Foundation. In 2012, the technician, now with Youthaiti, returned to meet Père Luckson, the new pastor, and built a second ecological latrine and the first arbor-loo. When the Haitian technician moved to the US, he introduced his Youthaiti colleague Jean Emy Elysee (known as Manlove) to us. Manlove visited Medor and found that the ecological toilets designed for community use were used as regular latrines, rather than as planned. They also were far more expensive than arbor-loos designed for individual family use.

So, Père Luckson, after consulting the parish council, asked Manlove and OLQP to bring arborloos to Medor. Manlove has coordinated training, construction, and evaluation of Medor's arborloo program ever since.

Strategy. An arbor-loo latrine is designed for individual families and is considered a best practice in rural sanitation. It consists of a shallow pit and a simple privacy structure, which members of a household build on their own. A concrete slab with an opening in the center is placed over the pit. After each use, a small amount of soil or ash is added to encourage composting, reduce smells, and discourage insect breeding. When the pit is full, the family moves the slab to a different location, tops the pit with soil, and plants a fruit tree. The fertilized tree will grow more quickly, improving the family's food supply and countering soil erosion, a major problem in Haiti.

Organizing, training, and ongoing education are key elements of the program. During each phase of the program, a parish leader accompanies Manlove to each community to explain the benefits of arbor-loos and select families based on their need, ability, and interest. The pastor purchases materials for the concrete slabs and arranges transportation to the communities. Manlove trains families how to identify proper locations for the arbor-loos, how to build and install slabs, and how to use the arbor-loo. For the evaluation, Manlove visits the households that installed arbor-loos and interviews as many as possible.

While participants receive the slab at no cost, they contribute by helping build them, attending training, building their own privacy hut, and using the arbor-loo properly.

Results. During the first phase, Manlove led the effort to install 71 arbor-loos in 2012-2013, almost all in Medor. A house-to-house evaluation in January 2014 found that all were being used as intended, and that arbor-loos helped reduce the incidence of intestinal disease. Based on this acceptance, OLQP applied to the International Foundation for a grant to expand to other areas and received it in 2015.

In 2016, 107 arbor-loos were installed in five outlying communities (chapel areas of Dodard, Manyan, Morne Mango, Marinette, and La Source) and Medor. Manlove purchased 5-gallon buckets for 75 participating families who did not have them already. He also provided "tipy taps" for families to add to their privacy huts to enable hand washing, and urged families to purchase dispensers of Klorfasil (chlorine tablets) or use similar products for water purification. The evaluation of 66 families found that these arbor-loos served an average of ten persons each. It also found that all were being used as intended and helped reduce the incidence of intestinal disease. No one had filled their pits and moved their arbor-loos yet. The beneficiaries were very pleased with this project, many using a toilet for the first time. The majority of those surveyed used treated water to wash their hands. The evaluation found that the many training sessions and active participation of so many residents made a significant impact in the community. Manlove received many requests for arbor-loos from other people.

In 2018, Manlove helped another 108 families in three chapel communities (Manyan, Jacot, and Dodard) and the outskirts of Medor install arbor-loos. He tirelessly promotes good hygiene practices, including the need to use treated water in the home. A follow-up survey of 41 arbor-loo recipients in late 2018 found that everyone in the family used the arbor-loo (except for one person) and that they used it all the time. Everyone washed his or her hands with soap, most all of the time. Most, but not all, used treated water for this.

In this same survey, 10 members of one chapel area that received arbor-loos in 2016 were also interviewed. Nine had filled their arbor-loo and moved it to another location. Eight planted bananas and yams over the filled hole. They said the plants grew faster and better there. Participants said another major benefit of the arbor-loo, in addition to improved health, was harvesting good food from the fertile soil.

By the end of 2018, 286 families installed arbor-loos. Households in seven of the 12 chapel areas, as well as the village of Medor, received arbor-loos along with education and training about sanitation. When there was an upsurge of cholera last year, **no one in any of the participating families became ill.**

Future. The plan is to expand arbor-loos with in-house water purification systems to the most needy in the remaining five chapel areas, combined with continuing consciousness-raising and follow-up to expand use of arbor-loos and in-home water treatment to all families in the vast parish.



Medor children display their family's arbor-loo.

The frame for the concrete slab is a key component of arbor-loo technology. The slab has built-in handles, making transport easier.



Manlove states, "People have received this toilet with joy, since for most it is the first time they will use a toilet." (Dec 2016 evaluation)

