Architecture students help create the foundations of a village. Bricks of Promise Buricks of Promise Bu

hen Chris Moore '05, M '10 stood in the African sun and finally clutched a handmade brick, he felt the drum beat of unity. He had spent a great part of his graduate years in Clemson's School of Architecture working toward this moment.

It wasn't just a brick. It was a literal and figurative building block — a brick that promised sustainability, friendship and a better future for a small village in Ghana. It's a piece of building material that has unified people on both sides of an ocean, a brick that portends commerce, culture, health and home. A brick that heralds vocation, growth and change to a village named Okurase. But the first brick Moore held was the remnant of disappointment.



Project Okurase — Nkabom Centre

Project Okurase is a partnership among people in South Carolina; Okurase, Ghana; England; and others, including drummer Samuel Nkrumah Yeboah, also known as Powerful. The overall purpose of the project is to address the HIV/AIDS crisis in Ghana by helping susceptible and orphaned children who are affected by the disease. The objectives are to provide skills training and formal education to vulnerable children and women, and to connect orphaned children with families.

To that end, students and faculty of the Clemson Architecture Center in Charleston designed a 16-building Nkabom Centre for Skills Training and Formal Education.

A program to train brick-makers would provide the basic building materials to start construction.

They eagerly learned their new craft but weren't able to keep the equipment. The people of Okurase found themselves with new skills but no machine, building plans but

no construction material except for a single pile of bricks. The latest new hope for self-sufficiency seemed to be snuffed.

The plight of Okurase is a familiar one: poverty, illness and a lack of water, infrastructure and education in a remote village of about 2,500 residents. The setback was just another in a long series.

$1 \times 4 \times 2 = Hope$

But the same architecture studio that designed the buildings had another idea: design, build and deliver another brick-making machine. Eventually, they would do even better. In October, four new machines arrived in the village. And while the old machine made one brick at a time, the new ones make two at a time.

Moore spent almost eight weeks in Ghana. He worked on site preparation for the first of the Nkabom Centre buildings while his wife, Evan, used her Winthrop University degrees in dance and in communications disorders to set up after-school workshops for the children, along with project coordinator Nana Ama Yeboah. Moore hoped to be there when the Clemson brick machines arrived, but the shipment was late and didn't reach Ghana until he was back in South Carolina.

No matter. There was plenty to do and the people of Okurase were eager to help. So Moore worked alongside the Ghanaians on site preparation to ensure proper placement and solid foundation.

"They received our help not as a handout but as a partner. It's our collective project. They were very receptive to that idea," says Moore. "Nkabom means unity, and the word really fits the people and the project. They love life, they love people, and there's a sense of community that's unparalleled here in the U.S."

The first building in the complex will not only be made of the bricks, it will also be made for the bricks. At 16,800 square feet, it will be, by far, the largest building in the village and home to the brick-making enterprise. The people of Okurase will use the building to produce the revenue that will lead to construction of the rest of the Nkabom Centre. Their textile crafts will be moved there, as well as drum-making — the tradition that led to the partnership in the first place.

A drummer named Powerful

Cynthia Cupit Swenson, professor of psychiatry and behavioral sciences at the Medical University of South Carolina and a volunteer with Project Okurase, helped connect Clemson and Ghana through a renowned drummer and drum-maker named Powerful. After a drum-making partnership that connected a community anti-violence project in Charleston to the drum-makers of Okurase, Powerful suggested a long-lasting partnership that could help the Ghanaians reach a level of sustainability.

"The idea is to work together for the people of Okurase to develop the means to help themselves," she says. "They're very open, honest people, and they are so eager for this chance to build something lasting."

Ray Huff, assistant professor and founding director of the Clemson Architecture Center in Charleston, says the brick machines and the center will have a ripple effect on the community.



"We hope this leads to a level of self-sufficiency for the people of Okurase. They can use the bricks to build the center. But it's more than that," he says. "They can teach people how to make compressed earth bricks, and they can train people in how to build, and when they have more bricks than they need, they can sell them."

Making a difference, Clemson-style

The project is a service-learning tradition that is the legacy of Robert Miller, who was director of the Clemson Architecture Center in Charleston for 10 years before accepting a position with the University of Arizona last summer. Miller's studios tied architecture to community service to bring about something good.

The studio connected with Project Okurase first to design the Nkabom Centre for Skills Training and Formal Education. The 16-building complex will give the village a place for health care, teaching, job skills training, child care and more.

Huff says the Clemson machines had to be manual because of the absence of electricity and durable enough to withstand years of heavy use. Time ran out for the students as the semester came to an end, but metal artisan Sean Ahern, a lecturer in the Clemson Architecture Center in Charleston, completed the design and construction of the machines that have been named the "Ahern Model."

Denis Brosnan of the University's materials science and engineering school tested the bricks for structural integrity.

"The Clemson professors and students have been incredible," says MUSC's Swenson. "It's an amazing gift that provides this village a means for a better life. In Okurase there is a saying: You are invited. The people of Okurase would like the people of Clemson to know that there is a feeling of kinship and that they are invited to be part of the family of Okurase from here forward."

For more on the Clemson Architecture Center in Charleston, go to clemson.edu/caah/architecture. For more on the Okurase Project, go to www.projectokurase.org.