

## Moringa Community: Using an Innovative Woodworking Technology to Build Hope by Rue Harrison and Ralph Morini

The story of how a poor Ghanaian carpenter built an improbable friendship with an American woodworker and how their shared values led to the birth of a vibrant organization dedicated to bringing the opportunity for a better life to rural West Africans.

### An Unlikely Start

Not only is friendship one of life's great treasures, but sometimes the least likely friendships are the most powerful. When Abubakar Abdulai (Abu), a poor Ghanaian carpenter, began emailing Jeffry Lohr in 2007, trying to find a way to attend Jeff's woodworking school in Schwenksville, PA, Jeff was justifiably skeptical. He regularly receives communications from individuals trying to find their way out of bad situations by gaining passage to the US. But, almost from the very start, something about this emailer kept Jeff engaged enough not to close the door completely. The emails portrayed an earnest young man who claimed to want to improve his woodworking skills in order to help people in his own country develop marketable skills and, in the larger sense, to offer them hope for a better future.

Eighty percent of Ghanaians live on very little, and malnutrition in children is commonplace. As Abu tried to communicate from the start, his goal was to provide an alternative to hopelessness. He was already engaged in woodworking education at the Baobab School, an orphanage school near his home village, but he felt his destiny was to expand his mission in a larger way.

Meanwhile Jeff was dealing with several other issues. An award-winning woodshop teacher, Jeff had gone on to become an internationally known designer/maker of fine, hand-crafted furniture. He had also gained recognition for his JD Lohr School of Woodworking near Philadelphia. Between furniture commissions and working through the waiting list of students for his school, Jeff's business schedule would have provided more than enough excitement for most healthy young men. Jeff, however, was also battling serious health issues. In recent years he'd survived a near fatal heart attack and a stroke and was battling severe spinal spondylosis, a calcium buildup on his vertebrae that kept him in a state of constant pain and on around-the-clock medication.

His spirit however, was doing just fine. Jeff and his wife, Linda, a bright, strong woman and two-time cancer survivor, have always lived their lives on their own terms. A connection

to poor, rural Ghanaians however, had never really been on their radar screen.

### Abu

But as Abu, in his quiet way, continued trying to convince Jeff that their destinies were connected, Jeff was listening. For several months they traded emails and phone calls. Abu was insistent; his sole intent was to help the poor people in his country, and Jeff and his school were a critical part of his plan. As Linda emphasizes, "At no point did Abu ask for anything for himself." Even so, in the end, it came down to a leap of faith. Jeff decided to offer Abu a place in his one-week woodworking class. Then it got complicated.

Abu needed a visa to gain entry to the US and he needed funding to be able to afford the costs. Jeff and Linda tried to help in both areas. They were able to get Abu an interview for the visa at the US embassy in Accra, Ghana, and they sought funding to support his travel costs. They were initially rebuffed in both areas. And despite a vigorous search, they were unable to raise funds for the project. Ironically, these early setbacks hardened everyone's commitment to make Abu's visit happen.

### Persistence

Jeff and Linda redoubled their efforts, even finding an immigration attorney who worked pro bono on Abu's visa application. All the while, contact continued between Jeff and Abu. Trust continued to grow, and money started to come in from Jeff's personal network. And during this hiatus, the two men began to expand the scope of their intended cooperation. Jeff and Linda extended the invitation to Abu from one week to a stay of three months. It would allow Abu a much deeper immersion into Western woodworking techniques.

Then, out of the blue, on February 12, Jeff received a call from the embassy. Abu could reapply for his visa. It would mean a second interview at the American embassy in Accra, however, and an additional fee of \$95. Jeff offered financial help to Abu for his travel costs from Cape Coast to Accra and the new application fee. It was a lot of money in a country where the average income is \$2/day and the deep levels of poverty unfathomable by US standards, but Abu flatly refused any help with the costs. "I never want to forget how much this cost me," he said. In that moment, Jeff knew that he had the right partner. When the visa was approved at the March 7 interview, there was no turning back.

### Abu's Arrival in the US

In April of 2008 Linda and Jeff drove up to JFK airport in New York to meet Abu. On their return to Schwenksville, it was clear the immediate need was to get clothes for Abu suitable for non-tropical temperatures. He was freezing. So the next morning Linda took Abu to the local K-Mart.

Says Linda, "I didn't really know anything about Abu. He was someone from a completely different world." She adds that this particular K-Mart was a contender for "the crappiest discount store on the East Coast." But the left-over winter clothes would be affordable. As she was digging around in a cardboard box on the floor of this dumpy K-Mart she was worrying, "What must this man think of me bringing a guest here?" As she put it, "I'm tossing sweatpants at this man, saying, see if these seem like a good

size, and since they're only \$2, let's buy three pairs! What colors do you like?"

She was not reassured by the expression on Abu's face. And as they were checking out she felt compelled to apologize. Then she asked, "Abu, do you have stores like this in Ghana?" Abu's answer, spoken in awe, was, "Only in the capital." The journey of discovery between cultures begins one step at a time.

### The Plan

As Jeff and Linda were driving Abu from the airport to their home, their goals were pretty simple: train Abu on Western woodworking machinery, send him home and then ship whatever machinery they could afford to Ghana in the years to follow. That was the plan. "Little did we know how out of touch we were with the real problems in Ghana," Jeff writes.

### Adjustments

Abu immediately attended a one-week version of Jeff's school, then worked alongside Jeff in his furniture business while becoming a member of the Lohr's household. He was learning woodworking and about life in the US, but the Lohrs began learning about Ghanaian life, too—its culture and inevitably, its hardships.

It didn't take long before the Lohrs realized the first problem with their plan: sending Western woodworking technology back to Ghana was totally impractical. Conventional machine tools were too expensive, too difficult to transport and consumed too much power. The power grid in rural Ghana could not support the technology we take as a matter of course in the US. Yet the goals remained the same: to improve productivity, making wood products practical and affordable. And somehow to move away from the total use of manual woodworking techniques, the physical rigors of which, leave dedicated carpenters unable to continue working while relatively young.

In the wake of this realization, however, a solution coalesced from the shared work of Jeff, Abu and the production team at Jeff's shop. It was both simple and elegant: a hand-held circular saw and router, each mounted in a precision hardwood table. These two devices, Jeff realized, could perform all the functions of a sophisticated table saw and planer, at 10% of the cost. They could run off a generator, too. And, except for the saw and router and a few accessories, it could be built entirely of materials readily available in Ghana. Abu christened the table-mounted ensemble Mr. Jeffrey's Third World Machine Shop.

Between mid-May when the concept was hatched and mid-July when Abu was to return to Ghana, refinements on Mr. Jeffrey's Third World Machine Shop (MJTWMS) continued to evolve. Ultimately, it was cloned, and Abu took the parts of the first copy back with him to be used as a template for building others. In addition, a teaching plan was developed and a vision of disseminating copies of MJTWMS throughout Ghana's Central region via graduates of a planned training center.

### A Side Issue Appears

While Jeff and Linda were learning about the hardships of life in rural Ghana from Abu, they were especially struck by a startling incongruity: several million Ghanaians are malnourished while a substantial portion of agricultural production rots in the field for lack of food preservation practices.

Linda, who had grown up in a time when thrifty, self-sufficient Pennsylvania farm values had not yet been completely superseded by big box stores, became involved in

developing a plan for introducing home canning techniques to rural Ghanaians. It would begin on an individual basis and eventually on a village scale. With the help of Jeff's staff, she and Abu made training videos of basic canning techniques. Fortunately a relationship has been established with an American glass supplier that promises to become an important partner in the canning efforts. By this point, it had become clear that a US non-profit organization was needed in order to help move these expanded goals forward. As they talked about how to bring the vision to reality, Linda and Abu adopted the moringa tree, a remarkably adaptable and nourishing plant, as the organization's symbol. Jeff coined the name moringacommunity.org as the formal name and the non-profit was born.

So, as Abu boarded his plane home on July 19, 2008, among his 300 pounds of carefully selected luggage were the pieces of a MJTWMS and a laptop computer loaded a PowerPoint presentation of the basic concepts of the moringacommunity.org vision. Abu seemed quietly confident as he said to Jeff and Linda, "Now let me show you what I can do. You will be surprised." Little did they know.

### Initiating the Operation in Ghana

Abu returned to Ghana amidst high expectations. After all, he had just spent several months in America, a place of limitless opportunity and astonishing realities. A core part of his mission was to bring hope to a discouraged people and, while he believed in his sponsors, he understood that what they were able to contribute was more in the form of inspiration than physical resources. He spent his first days back in Ghana isolated in his room, gathering his strength and his thoughts before attacking the next phase of the project.

Abu possessed several important assets for this mission. His father had been an advisor to village chiefs and elders, and Abu had watched his father influence village life. Abu was well aware that there were good chiefs and chiefs that were not so good. He knew also that the village system, thousands of years old, was still the soul of rural Ghana, not the more modern government system in the capital. Abu believed the best way to bring positive change in Ghana would be one village at a time. He took to the road, looking for a local sponsor.

Starting in his hometown of Cape Coast, he moved through rural villages, presenting the moringacommunity.org vision to anyone who would listen to him. After several weeks and many presentations, he met a visionary chief, Nana Kweku Adu-Twum, in the village of Brehman Baako, located about 50 miles inland from Cape Coast.

### The Training Center

In September 2008 the Brehman Baako chiefs and elders (one of whom, the Queen Mother, cares for the spiritual life of the village) deeded 9 acres of land to moringacommunity.org, and granted permission to harvest four trees to build the first training center. Perhaps in testimony to good karma, the land had access to power lines running past the village, a rarity in an area where most rural villages rely on gas generators for occasional power requirements.

By early October, Abu and his volunteer crew were at work clearing the land for the new building. Soon it became obvious that a truck was needed to haul people and materials to and from the site. At that point, several of the non-profit directors in the US stepped up and contributed \$8000 to buy one. By late November 2008, Jeff and Abu had put the finishing touches on the building specifications and all was ready for construction to begin in earnest.

The location of the building site for the center was across a small stream. Everything was hand portaged over this stream by a string of volunteers, many more than the 5 men per day that had been promised by the chief. The Americans supplied diesel fuel, cement, and some food. Women, children-everyone from the area was showing up to work. No one was paid, but they were fed one small meal a day. Some quit, for the work was backbreaking. But most of them stayed and brought others.

Everything was done on faith and trust. There were only promises that the Americans would not stop sending whatever money they could gather. There were only promises that the people in Ghana would provide the determination, will, and sheer physical effort to build this project for bringing positive change in the life of their village. And back in the States, the directors of [moringacommunity.org](http://moringacommunity.org) were tirelessly campaigning to insure that promises would be kept.

### Bridge

It eventually became evident that a bridge would have to be built over the stream, an addition to the already complex project. But once completed, it would make a huge difference in labor savings. Funding was found, with the Lohrs filling in financial gaps. The Ghanaians engineered and built a cement bridge capable of supporting the loaded truck. It was accomplished without any machines or draft animals. It was built entirely by hand, with women carrying bowls of cement on their heads.

Once the bridge was completed, the building of the training center moved forward quickly. Workers periodically took leave to tend their family farms, but the women, especially, kept coming. They were working for their family's future.

### Relativity

The training center as it took shape may appear modest to our American eyes, but as you look at it please remember: all the blocks were crafted by hand in over 100-degree heat. The stones, which go into the blocks, were all collected by the local children. Once collected, they were then hand crushed by the children and their mothers.

### Updates

In Ghana, Abu has been able to build several more copies of MJTWMS. He sees both a steady supply of trainees for the program and work for them after they are qualified. The Food Preservation program, on the other hand, has had to wait its turn in the resource limited world that is [moringacommunity.org](http://moringacommunity.org). Its time is coming.

In January 2010 Abu installed the metal roof on the building, continued work on the interior and stuccoed the exterior walls, decorating them with adinkra symbols. In February Jeff boarded a plane bound for Ghana. His aim: help set up the machine shop at the new training center.

### Jeff in Ghana

Abu had asked Jeff to bring cash and, immediately on arriving, Jeff handed it all over to Abu-who disappeared. He came back later with cedis, the Ghanaian currency. Abu knew how to get a better rate of exchange than could have been had at any bank. It was Jeff and Linda's personal money-not [moringacommunity.org](http://moringacommunity.org)'s-and he needed to make every penny count.

It was not a vacation, as Linda makes clear. It involved intense work in extremely hot weather and in conditions that were risky for Jeff, given his compromised health. Nevertheless, when Jeff speaks about what he experienced and saw there, his energy

lights up a room. [editor's note: I can testify to this having listened to Jeff myself.] And when Jeff sums it up in the oft-heard aphorism "It is better to give than to receive," these words come to life.

### Shopping Adventures

Jeff had drawn up the plans for the moringa shop using material Abu could get in Ghana, particleboard. What Jeff did not know is that it's not possible to just go and buy new particleboard. You go to the city of Takoradi and pick from particleboard that's been salvaged from demolition projects. What the sellers have available is confusing for an outsider, to say the least. One has no idea what most of the material is or where it came from. It's hard to know what shape it's in, and how much it's worth. Plus it may be necessary to locate multiple vendors to get all the sizes and shapes needed.

Jeff, being the only obruni-white man-at these markets, he got a lot of attention. People would yell, obruni! every time they saw him. White people are welcomed in Ghana, so it's not an insult. Instead, the shout amounted to an invitation to beg for money, follow him around and talk to him. Since, when obruni wants to buy something, the price goes up, Abu suggested a strategy. Jeff would stay hidden around the corner or down the road while Abu scouted the material and secured a good Ghanaian price. Then Abu would summon Jeff to make particular selections and the deal would be closed. As Linda says, "This was intense for Jeff. He was in an unfamiliar, third world city with no one around who spoke English but Abu. And since Abu was carrying all the money, when Jeff found himself alone, the subject of staring at every moment, he was completely dependent upon the trust that Abu would be back."

Abu returned each time. The particleboard they found did the trick.

### Some Thoughts on Education and Dreams

Back at the village of Breman Baako, Jeff participated in the ongoing work at the training center. Here are Jeff's words about his experience: "I think very few Americans could comprehend the lack of the most rudimentary resources on hand in Africa, materials we assume are easily available.

As a case in point, I include a photo. There were only two C-clamps to be had in the village, yet we had to meet the challenge of devising a way to glue and clamp a configuration that needed 12 clamps. In the photo, you see my improvised solution for doing our glue-up. It might be appreciated by other humble American woodworkers and carpenters.

Because I have had the privilege of living in a country where we have public libraries, public education, and where information is free to find if one is ambitious enough to look for it, I was able to meet this challenge. Because of the educational opportunities afforded all Western countries, improvising alternatives to basic problems in physics is possible. There are no such educational resources in West African countries, even in Ghana, with the highest literacy rate in that part of the continent. Even the local school I visited (with a student body of 150 plus kids) did not have one book. Any one of these fine Ghanaian carpenters could have done what I was able to do had they had even the most fundamental book of simple physics.

This is why I selected the photo of our improvised clamps as a backdrop to set the stage for what I must tell all our supporters about how I found life to be in the central region of Ghana. Healthy food is hard to come by. There are no Western doctors or clinics within 100 square miles. Books are not to be had and the luxury of a piece of paper and a pencil

is like a gift from the heavens. There is no post office in the entire district of 244 settlements. There are few wells for drinking water. Electricity, even when available, is unreliable. Phone lines are nonexistent. Shopping for consumer products is erratic and typically only second-hand goods are available. Paved roads were made by the British circa 1950, and have not been maintained since, except by local farmers who patch the holes.

Try to imagine this world, and then look at what these wonderful people have built-by themselves, 100% by hand labor, in circumstances that make even the simplest of tasks

difficult. I have not even mentioned the punishing heat (100-114 degrees F during my stay) that makes even modest physical effort stressful and back-breaking daily toil incomprehensible.

We had a vision that crossed oceans and cultures, and together we have simply made it happen through one essential ingredient: TRUST.

How to express the emotions I felt when I saw what we had carved out of the jungle? Not only did we have a dream, but we put feet under our dream. Our Community School of Trades is now the finest building in all of Baako."

- See more at: <http://www.conversations.org/story.php?sid=244#sthash.QOaq8HTX.dpuf>