

Humanitarian Bridgebuilding

Guest speaker: Toni Ruttimann

Toni has built 235 bridges working with local communities and the barest of resources.

In 1987, as he was finishing high school in Switzerland, he was drawn by TV images of the Ecuadorian earthquake. In Switzerland, one can grow up never having to think about river crossings as a fundamental need. In the Amazon region, he was struck by how people struggled when they could not cross rivers.

The big picture impact of this work? The rebuilding of a bridge after a disaster is a huge boost to the community and its residents, turning despair into hope. And the having the people involved is so important to the process: not just "able bodied young men" but women, children, older residents, divided groups working side by side.

Toni shows a multimedia slide presentation, highlighting the involvement of communities and messages of commitment, hope, and possibility. Here are a couple of representative photos from a bridge project in Vietnam.



Photos courtesy of Toni Ruttimann.

His approach: be completely committed to helping people as a way of life. Get donations of spare and salvage raw materials, work with local residents as volunteers on each project. He has no interest in becoming a traditional funded NGO; his goal is to work with local resources and people wherever possible.

The first bridge in Ecuador, 260 meters long, built entirely by hand, took about 2 years to complete. He remained in Ecuador for about four years, in retrospect a training period. During this time he built seven bridges and worked without money or sophisticated tools, then returned to Switzerland and was able to get two old trucks and welding machines. Today, he builds bridges much more quickly! But at the start, he had to figure every thing out

as he went along. For instance, once you get a much-needed surplus pipe from an oil company, how do you transport it?

After returning to Ecuador, he joined forces with an Ecuadorian welder named Walter. The two of them proceeded to build bridges much more rapidly than before.

They gradually moved beyond Ecuador, as disasters happened in neighboring countries. In such situations, they would ask the Ecuadorian government for help – for example, a military airplane to carry supplies to the affected location.

Example: November 1998, Hurricane Mitch in Honduras. 150 tons of materials (steel pipe, wire rope) were available in Houston TX. They were able to ship out 8 truckloads of materials in 36 hours, for free, on a Chiquita Banana boat. Meantime, the Ecuadorian government prepared a C-130 transport plane with additional supplies from Quito, and a ship sailing from Guayaquil carried still more supplies. In Honduras, a Honduras Air Force base became the local staging location.

A typical bridge of 50M span takes about 1 day to build the cement structures, and 1 day to erect cables and floor structure. Villagers supply labor, sand, stone, wood. Pipes, wire rope, clips, are supplied by the bridgebuilders. After 3 weeks, the bridge is complete.

Several years ago, a Cambodian refugee living in Switzerland heard about Toni's bridgebuilding work. He wanted to contribute something to national healing after the Khmer Rouge genocide. This person was able to connect with Cambodian government officials, and in 2 weeks time Toni got approval to start working. But Walter decided he wanted to remain based in Ecuador, so Toni had to find a Cambodian welder in order to make possible his dream of bridge building in Cambodia.

<view clip of film The Killing Fields to set scene...Khmer Rouge entering Phnom Penh, forcing residents out of city within 24 hours.>

Bridge building can be directed against natural disasters. And it can also be used to counterbalance the devastating effects of war. Toni has been building bridges in areas where the Khmer Rouge is still active, with military and civilians working side by side. Same in Honduras and El Salvador, working in communities that have been divided by old animosities. Building the physical bridge also reconnects people emotionally divided by conflicts.

In Vietnam, they would ask for 50 people to help, and 150 would show up. They show tremendous community spirit...installing loudspeakers to play "revolutionary music" at the work site.

There is no "company" at the heart of this work. It's simply three deeply committed people (Toni plus the two local welders), working in two regions with thousands of local residents, backed by the material support of a few companies and many individual supporters. They don't have offices, secretaries or other staff, ...new computing technologies and email have made this work so much easier (logistically) than it would have been 20

years ago. Says Toni, "You would almost have to be a coward to say "no" to doing this today."

A couple of years ago, Toni came down with Guillain-Barré Syndrome in Cambodia, causing extensive nerve damage and paralysis. He was in hospital and rehabilitation for 1 ½ years, learning how to stand and walk again. Not surprisingly, he used the time well, creating a laptop-based tool in FileMaker® and Excel to design bridges and track each site.

<Toni runs a demo of the tool – it's an amazing resource!! Automated design and verification based on initial site measurements, plus polished accounting and project management features. Display options in English, Spanish, Vietnamese.>

A bridge construction starts with the site survey, including topography measurements and local resource inventories. This information is emailed to Toni. He plugs the data into his tool, designs the bridge, then emails specification sheets back to the local team. Last year while Toni was in Cambodia, Walter built 18 bridges in Ecuador using only email contact and this tool.

Among all these bridges, nobody has ever been killed or even seriously hurt in the construction process.

Main message, emphasized throughout Toni's talk: You should believe you can do anything you imagine to help people, and act on it!