In search of sustainability

Grant takes McCormick student around the world to research sustainable development
Ben Shorofsky’s passion for sustainability began with, of all things, shoes.

Shorofsky was introduced to sustainable practices as a high school student in Baltimore, when a service club he was involved with started collecting shoes for a nongovernmental organization (NGO) in the West African nation of Ghana. The shoes would be sold to fund the installation of “miracle pumps”—stationary bicycles-turned-water pumps that allow farmers to drip-irrigate their crops, replacing the age-old and inefficient process of sloshing buckets one by one to plants.

Recently Shorofsky got to see these pumps with his own eyes. Shorofsky, an honors BS/MS environmental engineering major now in his final year at McCormick, spent last summer circling the globe to visit sustainable development projects in both developed and developing countries: Ecuador, Malaysia, the United Arab Emirates, Ghana, Denmark, Sweden, and the United Kingdom. The project was funded by a grant from the Circumnavigators Club of Chicago, an organization comprising people who have made a trip around the world. The club selects one Northwestern student each year to take his or her own around-the-world voyage. For Shorofsky, it was an opportunity not to be missed—especially since he had been considering taking a year off after graduation to do a similar trip on his own.

“At some point in my life I want to work in a job that is nonprofit or NGO related,” Shorofsky says. “I felt like I couldn’t do that without having seen the different models, the different work being done.”

After being selected and spending six months booking plane tickets and arranging for hostels and other low-budget accommodations, Shorofsky embarked on a sustainability adventure that would bounce him for the next three months between the developed and developing worlds. He saw Masdar City in Abu Dhabi, a high-tech, 2.3-square-mile planned development in which state-of-the-art “personal rapid transit” systems skitter people to their destinations. He visited Samso, a Danish island of 4,000 people that, since winning a government competition in 1997, has transformed itself to run completely on wind energy. He spent 11 days with a Malaysian NGO teaching composting and recycling techniques to schoolchildren in Kuala Lumpur.

And in Ghana, Shorofsky came face-to-face with that miracle pump, the instrument that sparked his budding career. He also saw some of the new endeavors of that NGO, such as teaching chicken-rearing strategies to farmers who, for centuries, have free-ranged their flocks, losing out on valuable nutrition and money from eggs.

As an engineering student, Shorofsky has always been impressed by chic designs and forward-thinking technologies. But as he worked his way around the globe, he became increasingly interested in the human element of sustainability—how even the greatest advances in the world can fail without a behavioral switch, a change in a people’s thinking about the world and their place in it. Over the course of dozens of videotaped interviews with residents, NGO workers, facilities managers, professors, and interns, Shorofsky noticed a trend: The most successful projects were ones borne by the people themselves, or, in the case of developing nations, those in which stakeholders made a careful effort to understand the needs and desires of the populations they were serving. Projects in which sustainability efforts were forced on residents seemed to stall.

“I really learned the importance of effective communication at the community level,” Shorofsky says, “I saw the troubles that NGOs, governments, and companies have in communicating things to people on the ground level. It can be difficult to get people to understand that this sustainability stuff doesn’t have to change your life, that it can be worked into everyday behaviors. That education is extremely important. These sustainability projects are great, but if they’re not really getting through to people, then they’re never going to work.”

In each of Shorofsky’s 40 interviews, he made it a point to ask the same question: What does sustainable development mean to you? He learned that no two people viewed sustainability the same way; while much of their research focused on environmental work, many NGOs practicing what they called “sustainability” were focused on promoting economic growth, teaching business practices, or helping communities branch into the tourism industry. There’s sustaining the planet, Shorofsky learned, and then there’s sustaining people. Ideally, the two go hand-in-hand.

In his final site visit before returning to the United States, Shorofsky was introduced to an idea that continues to plague him. If every human being on the planet consumed as many resources as a person living in the United Kingdom, we would need three planets to sustain us; if everyone consumed as many resources as a person living in the United States, we would need six.

“Six planets!” Shorofsky later remarked in his travel blog. “Just think about how much of an impact we are having in our daily lives and the damage that we’ll do in the long run. We can change this path, however, and with this research I hope to help.”

Now back in Evanston in his off-campus home—a “college-kid” apartment, by his own description—Shorofsky is distracted by the wastefulness of his leaky windows. He’s extra diligent about shutting off the lights when leaving a room and washing his clothes in cold water instead of warm, and he is starting in a limited way to grow his own food: For his birthday he bought himself a dwarf lime tree.

Shorofsky will spend much of this year analyzing the data he brought back from his trip; he is required to submit a 50-page report to the Circumnavigators Club and plans to use his trip as the basis for his McCormick honors thesis. He is also working toward a certificate, McCormick’s Certificate in Global and Ecological Health Engineering, which will likely send him on more international adventures.

For now, though, Shorofsky is eager to start enacting changes on the local level—where the real work needs to be done. “It’s great to go abroad and do all these things and help people who need it,” he said. “But when it comes to sustainability, we’re the culprits.”

Read Shorofsky’s travel blog at http://blog.undergradresearch.northwestern.edu/ben.

“Sustainability projects are great, but if they’re not really getting through to people, then they’re never going to work.”

BEN SHOROFSKY