



Illusion of the Green Revolution and How to Finally Spark a Real One

Growing up in Brazil, Adilson Motter used to fish in a river on his father's farm. When he visited a few years ago, he was surprised to find that the river no longer contained fish. In fact, he could barely find the river at all.

"The area had been heavily deforested, including regions close to the river," explains Motter, physics and astronomy, who is affiliated with the Northwestern Institute for Sustainable Practices (NISIP). "The consequence was more evaporation. Everything dried out." >>



Adilson Motter

Amanda Morris



Looking Back at Northwestern's Environmentalist Past

Humans should have disappeared nine years ago, according to a 1970 prediction at Northwestern's first pre-Earth Day event.

It was warnings like this by Barry Commoner, director of Washington University's Center for the Biology of Natural Systems, and a general interest in protecting the environment that spurred Northwestern Students for a Better Environment to plan and organize "Project Survival: A Public Teach-Out on the Environmental Problems of Species Man," an all-night environmental awareness education event held in the basement of the Technological Institute on January 23, 1970.

Fueled by 9,000 cups of coffee and 7,200 donuts, more than 4,000 members of the community attended what was the first of several similar events held on college campuses in the lead-up to the first Earth Day, April 22, 1970.

The program included multiple high-profile speakers, such as Illinois State Treasurer Adlai Stevenson III, Illinois Lieutenant Governor Paul Simon, and Commoner, who claimed that unless drastic action was taken, the human race would not survive the year 2000.

Through speeches, workshops, and film screenings, attendees learned about various topics, including the pollution of Lake Michigan, depletion of natural resources, over-population, and dangerous effects of pesticides. Folk singer Tom Paxton also held a midnight concert where he introduced the song "Whose Garden Was This?," which became an anthem for the first Earth Day.

More information about "Project Survival" can be found on the University Archives' web site at www.library.northwestern.edu/archives/exhibits/survival/.

As the climate crisis rages on, more people like Motter have become personally affected. Whether it's being involved in large-scale natural disasters like Hurricane Katrina or noticing a subtle shifting of the seasons, it's obvious that the world is in the midst of sweeping environmental change. The question is: What will it finally take to help solve this overwhelming problem?

The Superficial Illusion

"If you look at the media, the green revolution is already happening," says Kimberly Gray, civil and environmental engineering and codirector of NiSP. "But it is primarily branding that's happening. Much of it is superficial."

"Green" is the newest ubiquitous buzzword in the media. While browsing through the aisles of supermarkets, it's difficult not to notice all the products labeled as "ecofriendly," "sustainable," and "recycled." According to Gray, however, simply buying these products is not enough to spark a green revolution. She contends that while these products make consumers feel good, they do little to contribute to long-term sustainability. So as people continue to switch out their old light bulbs for high-efficiency models, Gray can only shake her head.

"Our households are more efficient than they used to be, but we're also using more gadgets," she says. "Maybe individual electronic devices are more efficient, but we've added to the assembly of things that we have. It all adds up."

Klaus Weber, management and organizations, says in addition to making them feel good about themselves, consumers buy green because they like the identity it projects to the outside world. Just as they enjoy wearing designer clothing labels, people enjoy driving hybrid cars because they think it makes them look cool. "My hunch is that if people really want to do something green, then they wouldn't just drive around a hybrid car," he says. "They would use public transportation or ride a bicycle."

If the green revolution is merely an illusion being touted by the media, then what really needs to be done to create massive change? NiSP researchers have a few ideas.

Weighing the 'Nutritional Value' of Products

Gray says the most important factor in sparking a green revolution is to change the way resources are priced. The cost of fossil fuels is based on extraction, human labor, and the pleasure the product brings. Then it is also topped with taxes and political interests. However, these costs do not take into account environmental costs or the cost of finding substitutions for when the natural resource is depleted.

"Our economy transfers those costs to the commons," say Gray. "Society bears them in terms of pollution or lack of substitutions. But there is no substitution for clean air and water."

On a smaller scale, even the items that people regularly buy often have hidden costs attached to them. "If it takes more water to produce enough cotton for a cheaper T-shirt, then there is a hidden non-monetary cost right there," Motter adds.

Motter recommends that information be distributed along with products to help people make better-informed choices. He likens it to the nutritional values printed on food packages that allow consumers to count calories. "There are products with hugely negative impacts on the environment and competitive products that have less of an impact," he explains. "People should be given information to compare the two."

'If You Build It, They Will Come'

Weber says that suppliers need to keep making lower impact products even if it takes awhile for consumers to catch on. While researching the green market at Kellogg, he found that unlike a regular economic system where demand drives supply, the green market tends to operate



Kimberly Gray

Andrew Campbell

backwards — development precedes consumer demand. Weber cites the example of wind energy. Although development began in the 1960s, demand for wind turbines didn't start growing until more recently. This was also the case in a study Weber completed on alternative farmers and ranchers who engaged in sustainable agriculture. "Consumers didn't approach the farmers asking for grass-fed meat products," he found. "They maybe knew they wanted something different, but they couldn't articulate what that was."

Gray believes the long-term vision of the supplier is a main component to sparking a green revolution and an important element for building a healthy economy. She explains that in the 1990s automobile companies had a choice about which direction to go. Because oil

Continued on p. 4



Klaus Weber

was inexpensive at the time, those companies went the route of the SUV and the Hummer. After the recent skyrocketing of oil prices, these same companies now struggle today. “Our society does not tend to look very far ahead,” Gray says. “Companies rise or fall based on their quarterly reports. With that, there’s too much value placed on short-term gain.”

Technology Problem or Behavioral Problem?

Gray, Motter, and Weber all agree that no matter what technology and products are developed, what will ultimately bring about a green revolution is changing our own behaviors. “Consumption is the engine of our economy,” Gray says. “There is this sense that things are abundant, and there will always be more. It’s really hard to think in a different way.”

Motter, who studies complex networks, contends that everything is connected — which is the problem

as well as the solution. If a few people begin to behave in a different way, then it could result in something that he calls a “behavioral cascade.” Just as celebrities endorse products, influential people could reduce their consumption and live more sustainable lifestyles. “People are influenced rather easily. They don’t make decisions as independently as we’d expect,” Motter says.

As the rivers dry up and fossil fuels become more difficult to extract, and with limited options for what to do when they’re gone, the climate crisis is a grim picture to behold. However, Weber says it’s at least a good sign that so many people are having these conversations. “You can talk to anybody about it, and they will at least know something. Ten years ago you might have gotten a blank stare. It’s mind-blowing how much that’s changed.”

—by Amanda Morris