

# Biting *The Hand*



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## How Globalization Cripples Small Farms *An Interview With Vandana Shiva*

ARNIE COOPER

# That Feeds

**T**wo weeks is not much time to prepare to interview Vandana Shiva. The author of fourteen books, the fifty-one-year-old Shiva is arguably one of the most successful leaders in the social-justice and ecology movements. That I was able to meet her at all was sheer providence: she was traveling from New Delhi, India, to give a talk at the University of California in Santa Barbara, where I live.

I first encountered Shiva while watching a televised debate from the 2002 Johannesburg World Summit on Sustainable Development. Speaking on behalf of the world's poor and disenfranchised, she explained to an industry spokesperson how globalization and the World Trade Organization were turning the people of the Third World into the property of multinational corporations. As fiery as she was eloquent, Shiva cited statistics, studies, and real-world examples to back up her arguments. There was little doubt in my mind as to who prevailed.

Born in the verdant Himalayan valley of Dehra Dun in northern India, Shiva grew up on her family's farm, in constant contact with the earth. Her father was a forest conservator, and her mother, a former official in the education ministry, had been displaced from her home when part of India became Pakistan in 1947.

"My mother taught me that a farmer and a university professor did not really have different status," Shiva says, "that education by itself did not make you a better human being." Moreover, she demonstrated to Shiva that nothing was beyond the reach of women. Both parents taught her to transcend gender stereotypes and to love simplicity.

From an early age, Shiva yearned to know more about nature. It was this desire, along with her admiration for Albert Einstein, that led her to become a physicist. "For the same reasons that I do ecology today," she says, "I did physics then: to figure out a little better the patterns of nature's laws."

Although Shiva started out as a nuclear physicist, she later realized she was practicing "one-eyed" science, her term for science that looks only at the benefits, not at the costs. So she moved on to theoretical physics, eventually getting a PhD in quantum theory from the University of Western Ontario. Around the same time, she became involved in the Chipko movement in India, a grass-roots women's initiative that succeeded in stopping commercial logging in the Himalayas.

Shiva continued with Chipko until 1982, when she founded



VANDANA SHIVA

the independent Research Foundation for Science, Technology, and Ecology in her hometown. Her goal was to work with local communities and social movements to promote sustainable agriculture and combat genetic engineering, water privatization, and factory farming. In 1991 she started Navdanya, a national movement to protect the diversity and integrity of living resources, especially seeds.

Shiva has been instrumental in challenging corporate-driven agricultural practices and attitudes about food. Her books *The Violence of the Green Revolution* and *Monocultures of the Mind* (both Zed Books) have alerted people around the world to the dangers of industrialized farming. She battled the Texas company RiceTec over their patent on basmati rice, a variety grown in India for thousands of years. In the late nineties she initiated the

international movement *Diverse Women for Diversity*, which acknowledges the role of Third World women as seed conservators and experts in the use of medicinal plants. Other global campaigns have taken her to Africa, Asia, Latin America, Ireland, Switzerland, and Austria. Her latest book is *India on Fire: The Lethal Mix of Free Trade, Famine, and Fundamentalism in India* (Seven Stories Press). More information is available on her website: [www.vshiva.net](http://www.vshiva.net).

Shiva still lives on her family farm in Dehra Dun with her twenty-one-year-old son and her brother and sister. Although countless people around the world owe their livelihoods to her, Shiva's own financial condition is anything but secure. "I really never know how my next month will be looked after — ever," she says. She gave up her university career to do volunteer work, and she doesn't take a penny from the organizations that she founded and runs. "I give my time and leave the rest to the larger forces of the cosmos," she says.

**Cooper:** What sparked your interest in becoming a physicist?

**Shiva:** In those days, the belief was that physics was the foundational language of nature. Ecology wasn't considered a real science yet. If it had been, perhaps I'd have chosen it as my first field.

I started out as a nuclear physicist and spent my summers training at India's only nuclear fast-breeder reactor. But I gave it up when my sister, who's a doctor, educated me about the health impacts of nuclear power. As physicists, we were never

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taught what nuclear power meant biologically. I see now that it's irresponsible to practice one branch of science without looking at the negative impacts in other fields. That's why I'm so opposed to genetic engineering.

I've never been disillusioned about theoretical physics, however. There's still a part of me that's drawn to it. In fact, right now I'm writing a paper on nanotechnology.

**Cooper:** What led you to dedicate yourself to the environment and social justice?

**Shiva:** In the mid 1970s, while I was still working as a physicist, I got involved with the grass-roots Chipko movement, which worked to protect forests in the Himalayan region where I was born. The women said, "If you want to cut these trees, then you'll have to kill us first." The movement spread like wildfire, and commercial logging was stopped in the high Himalayas.

In 1982 India's Ministry of Environment asked me to do an impact analysis of mining in my home valley. (They didn't know I was from there.) Because of my research, we managed to shut down the mines and cement plants and other polluting industries. I realized then that independent research was necessary for the protection of the planet, and it was something I could contribute, so I gave up my university career and returned home. My mother gave me her cow shed, and I've been operating from there ever since.

I knew that we had to find a different way, a different model of research, one that doesn't assume that five people in the university know it all, but recognizes that we can learn from a broad spectrum of individuals. Every time forests were logged and people protested, the experts worked for the logging companies. Every time the mountains were mined, the experts were the miners and geologists. Every time dams devastated the rivers, the experts were the engineers who were building those dams. Something was wrong. So I set out to create an institution that would bring other people into the conversation about ecosystems and the impact of commercial activity on people's lives. Now there is no division between my activism and my intellectual work. It's all part of a continuum.

**Cooper:** You say the conflict over global resources is not

about trade. How so?

**Shiva:** Globalization has been presented as purely a trade issue, but it is actually about appropriation of resources. It makes property out of things that have never before been owned as property. Native plant life replenishes itself and belongs to communities. The idea of patenting seeds, plants, and even genes of certain organisms threatens to change this. Similarly, water, which has always been recognized as a commons, is being privatized. This conflict involves nearly all of humanity — and all the species on this planet — versus a handful of corporations.

**Cooper:** Why is this happening now?

**Shiva:** Because capital has reached its limits. Capital accumulation always needs new domains, new frontiers. During colonialism, the frontiers were other continents. Europeans came and took the land that belonged to the native communities in India and Africa. Now the frontiers are water, plant life, and life itself.

The limits of capitalization have been reached in the wealthy, industrialized North: how many more SUVs can you sell to families that already have two of them? In the Southern Hemisphere, people are poor. You can't sell them SUVs, so you create new markets in the necessities of life, items that even the poor must have daily. Thus, you have a mechanism with which to suck capital from the poorest people of the world.

**Cooper:** WTO director Mike Moore denies that global trade benefits the rich at the expense of the poor. He says it's well established that trade boosts economic growth, and quotes Jeffrey Sachs and Andrew Warner of Harvard University, who found that developing countries with open economies grew by 4.5 percent annually in the 1970s and 1980s, while those with closed economies grew by just .7 percent a year.

**Shiva:** I've had many debates with Mike Moore and feel that he uses such figures in irresponsible ways. One must remember that the 1970s and 1980s were *prior* to globalization. Even the description of economies as "closed" and "open" is, I think, inaccurate. What he calls an open economy is closed with concern to people's basic needs and rights to resources. To me, an economy is closed when seeds are patented and peasants don't have access to them. It's closed when water is privatized and peasants have to buy irrigation water at ten times the cost. It's closed if corporations like Enron can fix energy rates and raise prices 700 percent.

The countries that did have real growth in the seventies and eighties — such as South Korea, Malaysia, and Thailand — also had highly regulated integration into the global market. After globalization, though, their economies started to collapse. Look at Malaysia and Thailand today. The history of the last decade has shown that opening to the global market without any corporate accountability or responsibility on the part of foreign investors is a recipe for disaster.

And the way growth is measured is misleading. The standard measurement is gross national product, which looks only at the market. So just taking something out of the public domain and putting it into the market yields automatic growth when, in reality, nothing more has been produced.



On the other hand, if you consume what you produce, then you're not counted as productive. That's how women's work and peasants' work disappears. As long as people are working in their homes, they're not contributing to growth. The moment they become slaves of others, however, suddenly they're contributing.

**Cooper:** What about the food surpluses in countries like India?

**Shiva:** If you look closely, every time there's talk of a surplus, there is no true surplus, just more being imported than exported. So surpluses are just the result of manipulated figures.

Right now India has 65 million tons of grain, much of it imported, rotting in silos because people are too poor to buy it, and the subsidies that once made food affordable have been withdrawn. Now all this grain is being sold to Cargill at half the price for which it was offered to Indian peasants.

**Cooper:** How do you respond to those who say that biotechnology is the only way to feed a global population that's going to reach 10 billion?

**Shiva:** I care deeply for people's right to food. I devote my life to ensuring that we have sustainable agriculture, productive methods, and efficient use of scarce resources.

Biotech fails the sustainability test, however, because the intellectual-property-rights system perversely treats plants and seeds as corporate inventions. Seed and crops have always

been celebrated as sources of life's renewal. But now, thanks to U.S. companies like RiceTec, which was granted a patent on basmati rice, the livelihoods of farmers in India and elsewhere are threatened. Allowing a company to claim invention for a plant variety denies the creativity of both nature and farmers. What is supposed to be the farmer's highest duty — saving seed and exchanging it with neighbors — has become a crime. The Asgrow Seed Company, owned by Monsanto, won a lawsuit against Dennis and Becky Winterboer, Iowa farmers who sold their soybean crops to other farmers to use as seed — crops produced from Asgrow varieties.

Biotech fails the productivity test, as well, because there is not a single genetic modification that has given us higher yields by itself. Yields of particular plants are a multigenetic trait. So far, the genetic engineers have been successful only in creating a genetic resistance to herbicide, for example, or a plant that produces an insect toxin. These traits do not increase yields; they redesign the plant to perform a certain function. And in both cases the function is unsustainable. Herbicide-resistant crops are not leading to fewer weeds but to the emergence of new resistant weeds. Similarly, Bt crops — crops that have been genetically engineered to produce a naturally occurring insect toxin — are not controlling pests; they're leading to the creation of pests that have a new resistance.

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