



Indian farmers in New Delhi protest new laws in 2001. The laws, changed to reflect a World Trade Organization agreement, allowed other countries to export hundreds of new products to India.

Stealing Nature's Harvest

BY VANDANA SHIVA

Food is our most basic need, the very stuff of life. According to an ancient Indian Upanishad, "All that is born is born of anna [food]. Whatever exists on Earth is born of anna, lives on anna, and in the end merges into anna. Anna indeed is the first born amongst all beings."

More than 3.5 million people starved to death in the Bengal famine of 1943. Twenty million more were directly affected. Export of food grains continued in spite of the fact that people were going hungry. At the time, India was being used as a supply base for the British military. More than one-fifth of India's national output was appropriated for war supplies. The starving Bengal peasants gave up over two-thirds of the food they produced. Dispossessed peasants moved to Calcutta. Thousands of female destitutes were turned into prostitutes. Parents started to sell their children.

As the crisis began, thousands of women organized in Bengal in defense of their food rights. "Open more ration shops" and "Bring down the price of food" were the calls of women's groups throughout Bengal.

After the famine, the peasants also started to organize. At its peak the Tebhaga movement, as it was called, covered 19 districts and involved 6 million people. Everywhere, peasants declared, "We will give up our lives, but we will not give up our rice." In the village of Thumniya, police arrested some peasants who resisted the theft of their harvest, charging them with "stealing paddy."

A half-century after the Bengal famine, a new and clever system has been put in place that is once again making the theft of the harvest a right and the keeping of the harvest a crime. Hidden behind complex free-trade treaties are innovative ways to steal nature's harvests of seed and nutrition.

I focus on India both because I am an Indian and because Indian agriculture is being especially targeted by global corporations. However, this phenomenon of the stolen harvest is not unique to India. It is being experienced in every society, as small farms and small farmers are pushed to extinction, as monocultures replace biodiverse crops, and as farming is transformed from the production of nourishing and diverse foods into the creation of markets for genetically engineered seeds, herbicides, and pesticides.

SEED

For centuries, Third World farmers have evolved crops and given us the diversity of plants that provide us nutrition. Indian farmers evolved 200,000 varieties of rice. They bred rice varieties such as Basmati. They bred red rice and brown rice and black rice. They bred rice that grew 18 feet tall in the Gangetic floodwaters and saline-resistant rice that could thrive in coastal water.

The seed, for the farmer is not merely the source of future plants and food; it is the storage place of culture and history. Free exchange of seed among farmers has been the basis of

maintaining biodiversity as well as food security; it involves exchanges of ideas and knowledge, of culture and heritage. It is an accumulation of tradition and of knowledge of how to work the seed. Farmers learn about the plants they want to grow in the future by watching them grow in other farmers' fields.

Paddy, or rice, has religious significance in most parts of India and is an essential component of most religious festivals. The Akti Festival in Chattisgarh, where a diversity of indica rices are grown, reinforces the many principles of biodiversity conservation. In Southern India, rice grain is considered auspicious; it is mixed with kumkum and turmeric and given as a blessing. New seeds are first worshipped, and only then are they planted. Festivals held before sowing seeds, as well as harvest festivals celebrated in the fields, symbolize people's intimacy with nature.

For the farmer, the field is the mother; worshipping the field is a sign of gratitude toward the Earth, which, as mother, feeds the millions of life forms that are her children.

CLAIMING SEED AS PROPERTY

The new intellectual-property-rights regimes, which are being universalized through the Trade Related Intellectual Property Rights Agreement of the World Trade Organization (WTO) [see Chapter 3], allow corporations to usurp the knowledge of the seed and monopolize it by claiming it as their private property. Over time, this results in corporate monopolies over the seed itself. Corporations like RiceTec of the United States are claiming patents on Basmati rice. The soybean, which evolved in East Asia, has been patented by Calgene, which is now owned by Monsanto. Calgene also owns patents on mustard, a crop of Indian origin. Centuries of collective innovation by farmers and peasants are being hijacked by corporations claiming intellectual property rights over plants.

Today, 10 corporations control 32% of the commercial seed market, valued at \$23 billion, and 100% of the market for genetically engineered, or transgenic, seeds. These corporations also control the global agrochemical and pesticide market. Just five corporations control the global trade in grain. In late 1998, Cargill, the largest of these five companies, bought Continental, the second largest, making it the single biggest factor in the grain trade. Monoliths such as Cargill and Monsanto were both actively involved in shaping international trade agreements, in

particular the Uruguay Round of the General Agreement on Tariffs and Trade, which led to the establishment of the WTO.

This monopolistic control over agricultural production, along with structural adjustment policies that favor exports [see Chapter 3], results in floods of exports of foods from the United States and Europe to the Third World. As a result of the North American Free Trade Agreement (NAFTA), the proportion of Mexico's food supply that is imported increased from 20% in 1992 to 43% in 1996. After 18 months of NAFTA, 2.2 million Mexicans lost their jobs, and 40 million fell into extreme poverty. One out of two peasants is not getting enough to eat. As Victor Suarez has stated, "Eating more cheaply on imports is not eating at all for the poor in Mexico."

ENGINEERING LIFE

Global corporations are not just stealing the harvest of farmers. They are stealing nature's harvest through genetic engineering and patents on life forms. Crops such as Monsanto's Roundup Ready soybeans, designed to be resistant to herbicides, lead to the destruction of biodiversity and increased use of agrochemicals. They can also create highly invasive "superweeds" by transferring the genes for herbicide resistance to weeds.

Crops designed to be pesticide factories, genetically engineered to produce toxins and venom with genes from bacteria, scorpions, snakes, and wasps, can threaten non-pest species and can contribute to the emergence of resistance in pests and hence the creation of "superpests."

To secure patents on life forms and living resources, corporations must claim seeds and plants to be their "inventions" and hence their property. Corporations like Cargill and Monsanto see nature's web of life and cycles of renewal as "theft" of their property. During the debate about the entry of Cargill into India in 1992, the Cargill chief executive stated, "We bring Indian farmers smart technologies, which prevent bees from usurping the pollen." During the United Nations Biosafety Negotiations, Monsanto circulated literature that claimed that "weeds steal the sunshine."

A worldview that defines pollination as "theft by bees" and claims that diverse plants "steal" sunshine is one aimed at stealing nature's harvest. This is a worldview based on scarcity.

A worldview of abundance is the worldview of women in India who leave food for ants on



Ravi Jaggu (background) gets ready to cycle to work as his grandfather and young neighbors sit outside their thatched hut in the Indian village of Bhimnagar Tanda in 1998. Ravi's father, a farmer, borrowed money to buy pesticides that were supposed to kill caterpillars that were infesting the cotton crop. When the caterpillars didn't die, the moneylenders encouraged the farmers to commit suicide, so that the debts could be repaid out of their liquidated assets. Ravi's father and more than 150 others succeeded in killing themselves — by swallowing the pesticide.

their doorsteps, even as they create the most beautiful art in kolams, mandalas, and rangoli with rice flour. Abundance is the worldview of peasant women who weave beautiful designs of paddy to hang up for birds when the birds do not find grain in the fields. This view of abundance recognizes that, in giving food to other beings and species, we maintain conditions for our own food security. It is the recognition in the *Isho Upanishad* that the universe is the creation of the Supreme Power meant for the benefits of (all) creation. Each individual life form must learn to enjoy its benefits by forming a part of the system in close relation with other species.

In the ecological worldview, when we consume more than we need or exploit nature on principles of greed, we are engaging in theft. In the anti-life view of agribusiness corporations, nature, renewing and maintaining herself, is a thief. Such a worldview replaces abundance with scarcity, fertility with sterility.

What we are seeing is the emergence of food totalitarianism, in which a handful of corporations control the entire food chain and destroy

alternatives. The notion of rights has been turned on its head under globalization and free trade. The right to food, the right to safety, the right to culture are all being treated as trade barriers that need to be dismantled.

SAVE THE SEED

In 1987, the Dag Hammarskjöld Foundation organized a meeting on biotechnology called "Laws of Life." This watershed event made it clear that the giant chemical companies were repositioning themselves as "life sciences" companies, whose goal was to control agriculture through patents, genetic engineering, and mergers. At that meeting I decided I would dedicate the next decade of my life to finding ways to prevent monopolies on life and living resources, both through resistance and through building creative alternatives.

The first step I took was to start *Navdanya*, a movement for saving seed, protecting biodiversity, and keeping seed and agriculture free of monopoly control. The Navdanya today has thousands of members who conserve biodiversity, practice chemical-free agriculture, and have taken a pledge to continue to save and share the seeds and biodiversity they have received as gifts from nature and their ancestors.

On March 5, 1998, on the anniversary of Mohandas Gandhi's call for the salt *satyagraha*,* a coalition of more than 2,000 groups started the *bija satyagraha*, a non-cooperation movement opposing patents on seeds and plants. Literally, *satyagraha* means the struggle for truth. Gandhi said, "As long as the superstition that people should obey unjust laws exists, so long will slavery exist. And a nonviolent resister alone can remove such a superstition."

In 1999, news of Monsanto's genetic-engineering trials in India leaked to the press. These trials were being carried out in 40 locations in nine states. State agricultural ministers objected that they had not been consulted on the trials, and they released the locations of the trial sites. Immediately, farmers in Karnataka and Andhra Pradesh uprooted and burned the genetically engineered crops. In Andhra Pradesh, the farmers also got a resolution passed through the regional parliament and put pressure on the government to ban the trials. After the first uprooting by farmers, the government itself uprooted the crops in other locations.

*Gandhi defied the British colonialists' monopoly on salt by leading a 24-day march to the sea to collect salt illegally.

FOOD DEMOCRACY

In India, the poorest peasants have been organic farmers because they could never afford chemicals. Today, they are joined by a growing international organic movement that consciously avoids chemicals and genetic engineering.

- In Britain, the Genetix Snowball movement, was launched in 1998 when five women uprooted Monsanto's crops in Oxfordshire.
- In February 1999, an alliance of U.K. farm, consumer, development, and environmental groups launched a campaign for a "Five-Year Freeze" on genetic engineering.
- In 1993 in Switzerland, a grassroots group, the Swiss Working Group on Genetic Engineering, collected 111,000 names favoring a referendum to ban genetic engineering. The biotech industry hired a public relations company for \$24 million to defeat the referendum in 1998. But the debate is far from over. A similar referendum was organized by Greenpeace and Global 2000 in Austria.
- In Ireland, the Gaelic Earth Liberation Front dug up a field of Roundup Ready sugar beet at Ireland's Teagasc Research Centre at Oakport.
- In France, farmers of *Confederation Paysanne* destroyed Novartis's genetically engineered seeds. France later imposed a moratorium on transgenic crops.

Throughout Europe, bans and moratoriums on genetic engineering, in response to growing citizen pressure, are increasing.

A survey released in November 1998 by the agribusiness-affiliated International Food Safety Council found that 89% of U.S. consumers think food safety is a "very important" issue — more important than crime prevention. Seventy-seven percent were changing their eating habits due to food-safety concerns. A *Time* magazine poll published in its January 13, 1999, issue found that 81% of U.S. consumers believe genetically engineered food should be labeled; 58% said they would not eat genetically engineered foods if they were labeled.

A DEMOCRACY OF LIFE

Ecological and organic agriculture is referred to in India as ahimsic krishi, or "nonviolent agriculture," because it is based on compassion for all species and hence the

protection of biodiversity in agriculture.

Our movements advocate the recovery of the biodiversity and intellectual commons. By refusing to recognize life's diversity as a corporate invention and hence as corporate property, we are acknowledging the intrinsic value of all species and their self-organizing capacity. By refusing to allow privatization of living resources, we are defending the right to survival of the two-thirds majority that depends on nature's capital and is excluded from markets because of its poverty. The movement is also a defense of cultural diversity, since the majority of diverse cultures do not see other species and plants as "property" but as kin.

This larger democracy of life is the real force of resistance against the brute power of the "life sciences industry," which is pushing millions of species and millions of people to the edge of survival.

These are exciting times. It is not inevitable that corporations will control our lives and rule the world. We have a real possibility to shape our own future. We have an ecological and social duty to ensure that the food that nourishes us is not a stolen harvest. In this duty, we each have the opportunity to work for the freedom and liberation of all species and all people no matter who we are, no matter where we are. ■

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Dozens of farmers ransack a Kentucky Fried Chicken restaurant in the southern India city of Bangalore in 1996.