

# Soy Monoculture in the Americas: Globalization Ruins Food Economy

by Marcia Merry Baker

Concentrated areas of soybean cultivation in only three countries of the Americas—the United States, Brazil, and Argentina—together account for 188 million metric tons, which is over 80% of all world annual soy production (229 million metric tons), and account for over 90% of all soybean exports. Far from being an agronomic success story, this soy monoculture—typical of other world food monocultures equally extreme—reflects the degree of commodities control exerted throughout globalized agriculture, by financial interests operating through chemical, seed-stock, food processing, and trading companies, over and above national governments.

The cartel control process mirrors what's happening in petroleum, diamonds, steel, and many other commodities. It reflects the breakdown of the world economic system, and a rush into speculation and securing positions along the sole supply lines of essential goods.

The soy monoculture is a menace. In Argentina, the forced shift into soy farming has been part of a mass displacement of farmers, and a drop in production of needed foodstuffs, with the result of hunger and starvation in a nation once known for its food production and diet (see article following). Moreover, monoculture practices—reliance on single crops and livestock, and on fewer and fewer varieties—make the food chain very susceptible to being wiped out from pathogens.

One new event underlines the point.

FIGURE 1

**Western Hemisphere Soybean Crop Area: 80% World Production, 90% World Exports**



Source: EIRNS/2004

On Nov. 10, the U.S. Department of Agriculture confirmed that soybean rust has been found in the United States for the first time ever. The rust, a fungus of the species *Phakopsora pachyrhizi*, was identified in Louisiana. It can cut yields significantly. Since the 2004 U.S. crop is mostly harvested by now, the questions become: Will there be fungicide available next year? Can farmers afford it? The same fungus—entrenched in Asia—arrived in South America in 2001, and has spread since, reaching Argentina in 2003. Its recent arrival in North America is attributed to the winds of this year’s exceptionally long hurricane season.



*A research plot of rows of soybeans. The plant’s origins go back over 3,000 years, to China; now it is a mainstay for oils, plant protein, and livestock feed, for the various diets of billions of people. November is the end of soybean harvest in North America.*

Monoculture of livestock presents other dangers, of potentially facilitating microbial “mixing bowls” for influenza, and other threats.

### Soy Hyper-Regions

**Figure 1** shows the major soy cropland regions in North and South America today, which evolved over decades in the United States; then more rapidly, over the past 25 years, in Brazil; and now most dramatically, in Argentina (**Figure 2**), under globalized food trade.

In the United States, it wasn’t until the 1930s, that commercial soybean operations came into being, for food and livestock feed. The bean, considered to have originated over 3,000 years ago in Manchuria, was not part of European farm and food culture. As of 1900, barely a few thousand acres were cultivated in the United States. But by 1960, some 10.1 million hectares (25 million acres) were planted to soy; by 1970, it was 17.5 million hectares (43 million acres). This year’s U.S. planting was a record 30.4 million hectares (75 million acres), the highest in history. The harvest is expected to be 84 million metric tons, the largest ever, with a record high yield. Over 30% of production is concentrated in Iowa, Illinois, and southern Minnesota (**Figure 3**).

Domestically, by the 1990s, 83% of U.S. margarine came from soy, and 80% of salad and cooking oils. This October, Monsanto and Cargill announced a partnership to get farmers to switch to their new patented “low-fat” soybean strain (requiring less hydrogenation in the final product); they intend to make a killing on the miracle bean in the near future.

In Brazil, the 1970 soy crop, from which exports were going to Japan, was only 1.509 million metric tons; but by 1980, it had grown to 15.156 million metric tons; 19.898 million in 1990; and today, 52.6 million. The area cultivated

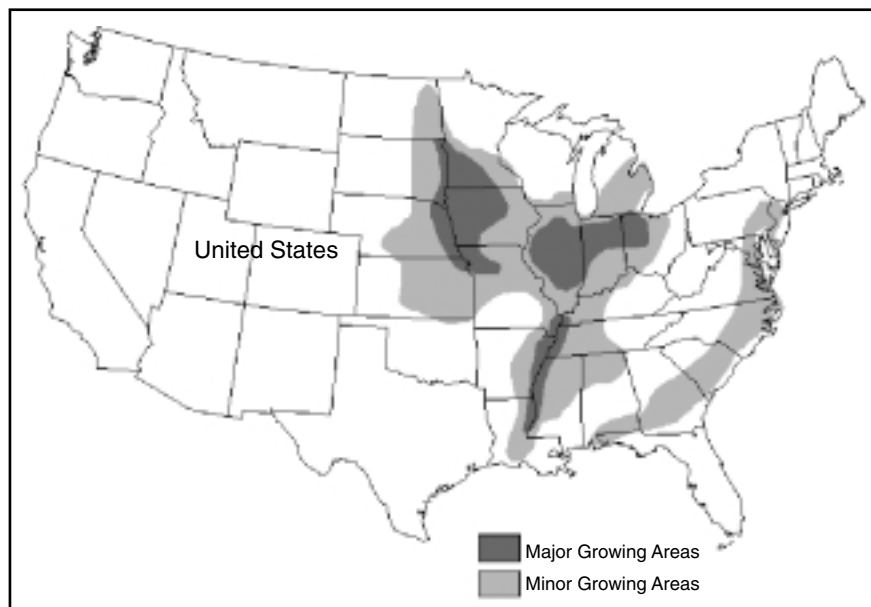
**FIGURE 2**  
**Argentina: Major Soybean Crop Area**



Source: EIRNS/2004.

FIGURE 3

### United States: Major Soybean Crop Area



Source: NOAA/USDA.

grew accordingly, including vast fields carved out of the Amazon ecosystem. In Argentina, the 1970 soy crop was 27,000 metric tons, reaching 3.5 million in 1980; 10.667 million in 1990; and today, in the range of 34 million. As shown in Figure 2, soy has “invaded” the famed Pampas and other regions.

### ADM, Cargill Cartel

A few names dominate the rise of the soybean in the Americas—Archer Daniels Midland (ADM), Cargill, CentralSoya, Bunge, Mitsubishi, and others. ADM, based in Illinois, and headed for 70 years by the Andreas family, is the world’s largest soy processor, calling itself “Supermarket to the World.” Its history is notorious for government swindling and thuggery. Michael Andreas, son of founder Dwayne Andreas, did jail time in the 1990s for price-fixing.

These companies, not nations, currently run the world soybean trade. The largest importing nations are China and the 25-member European Union, which together take over 60% of the world’s soy exports, 90% of which comes from Brazil, Argentina, and the United States.

Over 30 years ago, ADM, Cargill, Bunge et al. began to reposition much of their soy exports base to Brazil and Argentina. As this came about, the cartels demanded transportation improvements to serve their private interests. For example, at present, Cargill is part of a consortium demanding that a 1,071 kilometer Federal road be paved, from the

soy hinterland of Argentina’s Mato Grosso state, to Cargill’s deep-water port at Santarem, on the Amazon River.

The same point applies to the merits of the soybean itself. Other than for dietary preference, it is a diversion to debate the “pros” and “cons” of soy vs. meat protein. The fundamental point is that the commodities cartel is exerting dictatorial rights over national food supplies, and even over seedstocks—the means to life. During the 1990s, Monsanto won a patent, not merely for a new soybean strain, but for the procedure itself of genetic modification of soy! Its principal strain is “Roundup Ready,” referring to a bean that is impervious to the Roundup herbicide patented by Monsanto.

The scientific debate is not on the pros and cons of genetic modification. The evil lies in the actions of the cartel grouping—called synarchist as of 50 years ago—to arrogate decisions over seeds, plantings, and ultimately, over who eats, and who doesn’t.

Most of the U.S. soybean crop is now Roundup Ready. In Brazil, despite the fact that no Federal approval has been given, an estimated 30% of the crop in Rio Grande do Sul is Roundup Ready. Right next door, in Paraguay, on Oct. 20, the Agriculture Ministry approved four soybean varieties containing Monsanto’s Roundup Ready trait.

It is deceptive to infer from the big U.S. soybean harvest this year, that Cargill, ADM, et al. remain committed to their North American source of supply. Not so. In fact, Cargill and U.S.-based Smithfield, both giant meat processors, are setting up operations in Brazil for hog production and packing houses, utilizing soybean feed for *meat export*. On Oct. 29, European Union approval was given to Cargill to acquire Brazil’s Seara Alimentos SA. This furthers Cargill’s using Brazil as an export source for pork and chicken. Brazil’s exports of poultry and pork soared by 53% this year, reaching \$1.92 billion.

At present, U.S. soybean prices to the farmer are barely \$5 a bushel, less than 10 years ago. Cargill is posting record profits, attributing this to *lower soy costs*. For the quarter ending Sept. 30, Cargill’s profits were up by 77% from the same time a year earlier (\$266 million, or 41¢ per share, up from \$150 million).

And the U.S. Department of Agriculture reported on Nov. 11 that by 2005, the United States is expected to become a net food-importing nation for the first time.