

# What's the Big Idea?

## Return from the Twilight Zone of Food

By Howard Silverman

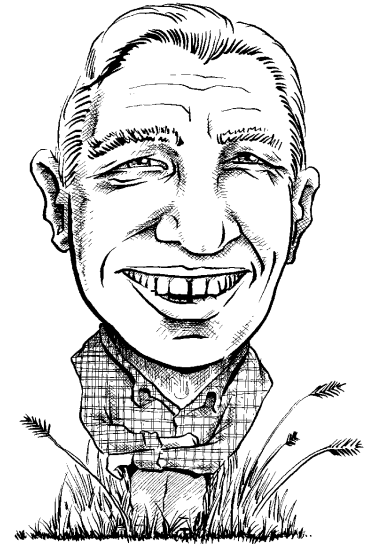
Our food choices have changed greatly in the last decade or so. Remember when making a salad meant breaking out the iceberg lettuce? Or when brewing coffee involved nothing more than stirring some powder into hot water? These days, it's commonly recognized that an iceberg salad is far less nutritious than a host of alternatives - romaine, spinach, arugula. And the less said about the taste of instant coffee the better.

These reminiscences draw upon an unusual period in American eating habits: an era of canned peas, frozen TV dinners and Tang - the sugar water glorified as "the astronauts' breakfast drink." It's hard not to be seduced by the sheer convenience offered in this twilight zone of food. But whatever you think of these foods, they are products of the era in which the economics of industrialization rose to dominate our food system.

Just what is meant by the term "industrialization of agriculture"? In *American Agriculture in the Twentieth Century*, economist Bruce Gardner defines it as a pattern of developments: a specialization of production, a concentration of land and income on the largest farms, a growth of purchased inputs such as seeds and pesticides, and an expanded use of contracts that reduce the entrepreneurial role of farmers.<sup>1</sup>

It's a description that sounds familiar - the logic of corporate integration and factory management applied to the production of food. One report for the U.S. Department of Agriculture (USDA) defines the industrial food system more succinctly. They call it the "production and delivery of food at the least economic cost, to those who can pay for it."<sup>2</sup> Leaving aside for now all the hidden costs that aren't counted, like the loss of topsoil, bustling farm towns, and clean water, the question remains: is price the only basis on which we judge our food? Is food, to speak the language of the economist, a fungible commodity - with any one item as good as another as long as it fills our stomachs?

These days, people who are seeking healthier, fresher and tastier choices are rediscovering the joys and values of a more honest kind of food, epitomized by our [Local Lucy](#). As a result, farmers' markets are booming and even national supermarket chains are starting to offer a wider selection of regional choices, including organics. If these choices are so great, how did we get away from them in the first place? What led to all this industrialization?



"The lords of the manor in the feudal system of the Middle Ages in Europe demanded no more of their subjects than modern suppliers of chemicals, machinery, and fuel demand of theirs... It is not the farmer who is being subsidized so much as the lords of corporate agribusiness. The farmer just launders the money."

**-- Wes Jackson,**  
Essayist and Founder of The Land  
Institute

Source:  
"Falsehoods of Farming"

## Factors Leading to Industrialization

Some analysts point to economies of scale, saying that consolidation of farmland allows for increased productivity and therefore higher profitability. But while remarkable increases in productivity have led to a doubling of agricultural output since 1930, this rise may be attributed to a host of factors – chemical fertilizers, irrigation, etc. Meanwhile, measures of profitability can be very slippery. On a market value of crops per acre basis for example, USDA statistics clearly show that farms of, say, 50 to 70 acres in size are twice as profitable as those of 500 to 1000 acres.<sup>5</sup> And, citing the decreasing value of farm outputs relative to the rising cost of inputs, Harvard agricultural economist C. Peter Timmer points to "an unrelenting drop in the agricultural terms of trade," and calls the growth in productivity "an increasingly hollow victory."<sup>4</sup> Is this the American success story after all?

"Get big or get out," declared U.S. Secretaries of Agriculture from the 1950s to the 1970s.<sup>5</sup> Their words reflect a federal bias towards large farms that persists to the present day. One example is highlighted in the 2001 USDA Food and Agricultural Policy admission that federal subsidies benefit absentee landlords far more than the 42 percent of professional farmers who are renting land.<sup>6</sup> In fact, Chevron, DuPont, International Paper and other Fortune 500 companies receive annual farm subsidies as high as 60 times the average payment to the bottom 80 percent of recipients.<sup>7</sup> Other de facto government supports for the industrial system include oil subsidies, research dollars directed to the needs of agribusiness, and extensions to patent law that allow companies to own strains of crops.

These incentives contribute to a market environment in which agribusiness corporations find the techniques of industrialization irresistible. One example is a growing reliance on "contract production" - arrangements in which corporations not only provide many of the inputs but also make many of the on-farm decisions. Tyson, Gold Kist, Pilgrim's Pride, and ConAgra rely on the contract system for their control of half the U.S. market for broiler chickens.<sup>8</sup> Another example is an enthusiasm for Genetic Engineering (GE). Monsanto now enjoys, through its GE patents, exclusive ownership of all GE varieties of soybeans, totaling over half the planted soybean acreage worldwide.<sup>9</sup> With GE patents, the traditional agricultural practices of saving seeds from year to year or trading them among neighbors become illegal: farmers must buy the seeds anew with each planting. In fact, hundreds of American farmers have been harassed by Monsanto with lawsuits for "theft" of its property - the saving of seeds.<sup>10</sup>



"The only measure by which the large farms are better is that of productivity of labor. On these large farms enormous quantities of energy are substituted for labor."

– **Herman Daly**,  
Former Senior Economist at the World Bank

Source:  
*For the Common Good*

## Finding Our Way Back Home

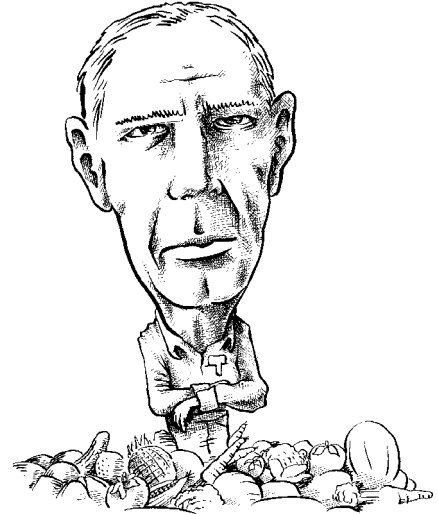
The consequences of industrialization are highlighted in our *Tale of Two Tomatoes*. Economist Herman Daly describes three kinds: increased labor productivity depopulates rural areas; prices skewed by the non-inclusion of social and ecological costs lead to an unsustainable use of the land; and "free trade" leads to specialized export production and, especially in less-developed countries, to the inability of rural peoples to feed themselves.<sup>11</sup>

Another group of consequences has risen to prominence since Daly's 1994 assessment: geographic concentrations of production and distribution lead to a decline in "food security." Urban areas often have a minimum of food on hand at any given time. And low-income neighborhoods may be left without any nearby food sources whatsoever - for example after WalMart, the largest food retailer in the nation, moves near to town.<sup>12</sup>

"The industrialized, conventional way of farming is not necessary - or inevitable" concludes the Funders Agriculture Working Group in their report *Roots of Change*. Not necessary, not inevitable, and certainly, as we are learning, not desirable.

There is no denying that there was a time in American history when we were fascinated by industrialization and the conveniences that it promised. Our preferences were shaped through advertising and as part of the larger cultural landscape. Tang, for example, was introduced to the market in 1959 but didn't become a household staple until years later when a barrage of commercials told children to emulate the astronauts. And the popular space-age cartoon *The Jetsons* depicted the future of food as manufactured pills - the apex of industrialization. Now in the opening years of the 21st century, as we journey to the future of food, we look around to find that something has been lost along the way.

Food products, after all, are not widgets. There's more to the value of food than "least possible cost." On a bodily level, we enjoy the flavor and crave the nutrition. Taking a moment to connect the food to the field, we find that our food choices can also help build strong communities and maintain a healthy environment. For despite government confusion and corporate dominance, the power of realizing a return to honest food lies with us - the eaters. In our modern economy, the choices we make as consumers can be as important as the choices that we make as citizens in a democracy. As Wendell Berry reminds us, "One reason to eat responsibly is to live free."



"Eating is an agricultural act. Eating ends the annual drama of the food economy that begins with planting and birth."

– **Wendell Berry**  
Farmer and Essayist

Source:

"The Pleasures of Eating"

[http://www.stjoan.com/ecosp/docs/pleasures\\_of\\_eating\\_by\\_wendell\\_b.htm](http://www.stjoan.com/ecosp/docs/pleasures_of_eating_by_wendell_b.htm)

<sup>1</sup> Gardner, B. (2002). *American Agriculture in the Twentieth Century*. Cambridge, MA: Harvard University Press, p. 71-2, 340.

<sup>2</sup> Integrity Systems Cooperative (1997). "Adding Value to Our Food System: An Economic Analysis of Community Food Systems." Sustainable Agriculture Research & Education Program, U.S. Department of Agriculture, p. v.

<sup>3</sup> National Agricultural Statistics Service (1999). "1997 Census of Agriculture - United States Data. Table 49-Summary by Size of Farm: 1997." National Agricultural Statistics Service, U. S. Department of Agriculture, p.96-97.  
<http://www.nass.usda.gov/census/census97/volume1/us-51/toc97.htm>

The subject of farm size versus productivity is further discussed here: Rosset, P. (1999). "The Multiple Functions and Benefits of Small Farm Agriculture: In the Context of Global Trade Negotiations." Food First/ The Institute for Food and Development Policy, p. 5-9.  
<http://www.foodfirst.org/pubs/policybs/pb4.pdf>

<sup>4</sup> Timmer, C. (2002). "Unbalanced Bounty from America's Farms." *Science*, vol. 298, 15 Nov.

<sup>5</sup> Ezra Taft Benson and Earl Butz.

<sup>6</sup> U.S. Department of Agriculture (2001) "Food and Agriculture Policy: Taking Stock for a New Century." U.S. Department of Agriculture, p. 6.  
<http://www.usda.gov/news/pubs/farmpolicy01/content.pdf>

<sup>7</sup> Environmental Working Group webpage (as of August 2003). "Farm Subsidy Payments to Fortune 500 Companies vs. the Average Payment to the Bottom 80 Percent of Farm Subsidy Recipients Nationally (1996 - 2000)." Environmental Working Group.  
<http://ewg.org/farm/subsidies/fortune500.php>

<sup>8</sup> Hendrickson, M. and W. Heffernan (2002). "Concentration of Agricultural Markets." Department of Rural Sociology, University of Missouri.  
[http://www.agribusinesscenter.org/docs/Ag\\_Processing\\_Inc.\\_1.pdf](http://www.agribusinesscenter.org/docs/Ag_Processing_Inc._1.pdf)

<sup>9</sup> Monsanto owns all GE varieties of soybeans: ETCGroup News Release (2003). "Patently Wrong." ETCGroup. [http://www.etcgroup.org/documents/nr\\_EPO\\_verdict2003.pdf](http://www.etcgroup.org/documents/nr_EPO_verdict2003.pdf)

GE soybeans account for over 50% of planted soybean acreage worldwide: James, C. (2002). "Global Status of Commercialized Transgenic Crops: 2002" International Service for the Acquisition of Agri-biotech Applications. <http://www.isaaa.org/>

<sup>10</sup> Daly, H. and J. Cobb, Jr. (1994). *For the Common Good*. Boston, MA: Beacon Press, p. 268.

<sup>11</sup> Weiss, R. (1999). "'Gene Police' Raise Farmers' Fears." *Washington Post*, 3 February, p. A1.

<sup>12</sup> "In the past decade, 29 chains have sought bankruptcy-court protection, with Wal-Mart as a catalyst in 25 of those cases.": Callahan, P and A. Zimmerman (2003). "Price War in Aisle 3." *Wall Street Journal*, 27 May, p. B1.