

Crisis and Opportunity in American Agriculture; Revisitedⁱ

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Fourteen years ago, I made a presentation at an agricultural conference in Brandon Manitoba that became the title chapter of my book, *Crisis and Opportunity: Sustainability in American Agriculture*.¹ It began: “North American agriculture is in crisis. Until recently, the crisis had been a quiet one. Thousands of farm families were being forced off the land each year, but we were being told by the *agricultural establishment* that their exodus was inevitable – in fact, was a sign of progress. Those who failed were simply the victims of their own inefficiency, their inability to keep up with changing times, their inability to compete.”

It went on to quote from a new book at that time, *The End of Agriculture in the American Portfolio*.² The author, Steven Blank, was a University of California agricultural economist. His main thesis was that American farmers in general could not compete in a global free-market economy. The “end of America agriculture,” he said, was the result of an inevitable economic process that would actually make everyone better off. He argued that globalization of the food system was not some corporate conspiracy but simply the inevitable consequence of competitive free markets. He foresaw a future when North Americans would import nearly all of their foodstuffs from “lesser developed” countries. He thought everyone would ultimately benefit from economic globalization because food would be more affordable for more people.

I agreed with Blank about the lack of competitiveness of U.S. farmers in a global free market. I did not agree that everyone would benefit from a single global economy: “There are valid logical ecological and social reasons to keep farm families on the land and for every nation to maintain the integrity of its agricultural sector.” Market economies never have and never will provide domestic food security. That's why virtually every nation on the world has some sort of farm policy. Furthermore, “We need not sacrifice our national food security and our quality of life for the sake of short run economic efficiency. But, we may well be forced to rethink the role and scope of agriculture within the global economy – as well as within human society. We may have to develop a *new American farm* to prevent the *end of the American farm*.”

Blank and I both underestimated the influence of the corporate/agricultural establishment on government policies.ⁱⁱⁱ Generous government subsidies have kept U.S. farmers from being forced to compete in global markets. In addition, a government biofuels mandate has been keeping more than 40% of the U.S. corn crop out of global markets – to be “burned” in U.S. automobiles. Crop

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ⁱⁱⁱ The Agricultural Establishment, as used here, refers to the USDA, major agricultural universities, major commodity organizations, and some of the general farm organizations, such as the Farm Bureau Federation.

failures of this magnitude would have been mourned as a humanitarian disaster. Commodity-based government subsidies are now being replaced with subsidized crop insurance programs that insure both yields and prices, virtually guaranteeing profits. U.S. taxpayers are picking up roughly half of crop insurance costs. Farming in the U.S. has never been more profitable.

Obviously, today's crisis is quite different from the crisis Steven Blank and I anticipated 14 years ago. Today's crisis is a crisis of control – corporate control. Greater certainty and stability of the farm economy has accelerated an ongoing corporate takeover or “corporatization” of American agriculture. According to the 2012 U.S. Census of Agriculture,³ the largest 4% of producers, those with annual sales of more than one-million dollars, now account for two-thirds of the total value of U.S. agricultural production. Virtually all of these large operations produce under some form of corporate influence or control. More than 95% of poultry and 70% of hogs in the U.S. are produced under comprehensive corporate production contracts. More than 90% of soybeans and 85% of corn is produced using patented genetically engineered seeds requiring corporate licensing agreements. About 40% of U.S. farmland is likely to change hands over the next two decades. Non-farm investors already own about 30% of all U.S. farmland, and large private equity investors have become major competitors in farmland markets. Corporate control of U.S. agriculture is well underway.

The issue of who will control agriculture certainly is not new, but has never been more critical than today. It has been a critical question ever since commodity farms replaced subsistence farms at the time of the enclosures in Europe, but never before has food production been controlled by entities other than real people. Whoever controls farming ultimately controls food production and has the power to control society – nationally and globally. The crisis of corporate control of agriculture is a crisis not only for farmers but also for consumers and society as a whole.

The large, publicly traded corporations that control agriculture are very different from “real people” – regardless of rulings of the U.S. Supreme Court. Family corporations are little different from families, as family members can express their *personal* values in management of the corporation. Large, publicly traded corporations, however, have no *personal* values: they are legal *economic* entities, not real persons. While corporate investors may have individual social and ethical values, their only common or shared values are *economic*, specifically, the desire to enhance the economic value of their investments. With most individual investments made through pension funds and mutual funds, most investors don't even know which stocks they own on any given day. Electronic trading, where stocks are more likely to be owned for seconds rather than years, eliminates any ability for individual investors to influence corporate management. Maximizing economic returns is the logical default strategy for corporate management.

The fundamental problem with corporate control is that economic value is inherently individualistic, impersonal, and instrumental – a means to an end. As a result, there is no economic value in doing anything for the sole benefit of anyone else or for a community or society as a whole. There is certainly no economic value in investing anything for the benefit of those of future generations; there will be no means of realizing a return on the investment – by then, the investor will be dead. Consequently, economic value inevitably places a premium on the present relative to the future. That's why people have to pay interest when they borrow and expect

interest when they lend money. That's why corporate planning horizons rarely extend more than five to seven years in the future, and quarter-to-quarter profits are critical to corporate job security.

Real people do things for the good of others, their communities, and their countries – because real people they have “personal” values. Real people also do things for the benefit of future generations and the good of humanity – because they have “non-instrumental” ethical values. Real farmers have hearts and souls; corporations have neither. Corporations are neither immoral nor moral; they are amoral. Even though corporations do not yet have complete control of agriculture, they still put constant pressure on real farmers to behave like corporations in order to survive economically – to extract wealth from the land and exploit their communities and customers. It matters who controls agriculture. The crisis in American agriculture is a crisis of control.

A crisis is a time of great peril but also a time of great opportunity. The Chinese word for *crisis* is commonly interpreted to mean both danger and opportunity. The Chinese symbol for crisis is composed of two characters. Scholars generally agree the first symbol means “danger,” but some suggest the second symbol is most accurately interpreted as “a critical point in time.” A crisis then is a point in time when we are forced by perilous circumstances to make choices that will fundamentally change the future, for either better or worse. Within today's crisis, there is great danger but also great opportunity. Today's farmers can change the future of farming and the future of humanity for either better or worse. But, we must first find the courage to confront the realities of the perils if we are to realize the opportunities.

The crisis of corporate control of agriculture is ultimately a crisis of agricultural sustainability. The fundamental question of sustainability is: “How can we meet the needs of the present without diminishing opportunities for the future?” When we ask the question of sustainability – earnestly and honestly – we come to the inevitable conclusion: today's food system isn't even meeting the needs of most of people of the present, and most certainly isn't leaving equal or better opportunities for those of the future. We can't continue in the direction we are going. The American food system, including American agriculture, is not sustainable.

I could cite volumes of ecological and socioeconomic research and gigabytes of government data documenting the negative ecological and social impacts of an agriculture that increasingly is driven by the economic bottom-line. The industrialization of American agriculture; with its specialization, standardization, and consolidation of control of agriculture was a logical strategy for a quest for ever-greater economic efficiency. The unrelenting quest for economic efficiency through consolidation inevitably led to corporate control. Reams of government reports and scientific articles clearly link industrial agriculture to soil erosion, air and water pollution, the demise of family farms, and the economic and social decay of rural communities. Industrial agriculture may have been profitable for some but it has not been good for most of the people who farm or most people who live in rural communities.

Furthermore, industrial agriculture has failed its most fundamental mission, which was to make good food accessible and affordable to everyone: to provide food security. I spent the first half of my 30-year academic career promoting industrial agriculture before I concluded industrial agriculture would never provide good food for everybody. In fact, a larger proportion of people in the United States are food insecure, meaning hungry, in the United States today than in the

1960s, before the later phases of agricultural industrialization. The industrial food system has failed to feed the hungry.

Furthermore, the quick, convenient, cheap foods produced by the industrial food system are making people sick – particularly those at lower income levels. We have documented epidemics of diet-related diseases in the United States, including obesity, hypertension, heart disease, and a variety of cancers. People in the U.S. now spend twice as much on healthcare as is spent for food and at least seven of the top ten life-shortening diseases are related to the American diet.⁴ We simply cannot afford the high cost of cheap food produced by a corporately controlled agriculture.

The combination of growing corporate control and corporate influence on American agriculture virtually guarantees a continued focus on economic efficiency, regardless of consequences for the land and the natural environment – or for the people who farm and live in rural communities. The only “common interests” of those who invest in the large multinational agribusiness corporations are profits and increasing stock values. These corporations will produce wherever in the world they can produce at the lowest cost and will sell their products wherever in the world they can sell at the highest prices. Wealthy people can afford to pay higher prices for crops for biofuels than poor countries can afford to pay for crops for food. The hungry will continue to be hungry and the poor will continue eating whatever makes the most money for the corporations, regardless of the consequences for public health.

Admittedly, there is no consensus on these matters. The indictments of industrial agriculture are countered with data showing the declining portion of consumer incomes spent for food and the variety of food products available year-round in modern supermarkets coming from every corner of the earth. Some will even admit the consumers' demands for cheap food inevitably comes with environmental and social costs. According to the agricultural establishment, the food industry is simply giving consumers what they want and what they are willing to pay for.

Regardless of whether individual farmers consider the crisis to be real or imagined, growing corporate control has created a “crisis of confidence” in the American food system. Within the crisis of confidence, there is opportunity. In 2010 Jamie Oliver, an outspoken British chef turned activist, called for a “food revolution” in America. The occasion was the premier of a six-episode reality show on ABC Television. The premise of the show was that physical health is linked directly to diet. He quoted from an article in the *New England Journal of Medicine*: “Obesity is such that this generation of children could be the first basically in the history of the United States to live less healthful and shorter lives than their parents.”⁵ Oliver focused his effort on trying to get highly processed foods out of public schools. Michelle Obama has taken the battle to get good food into public schools to the highest levels.⁶ Both have been confronted with stiff opposition from the agricultural establishment, but they have strong and growing public support.⁷

Scientific studies are confirming that the sources of diet/health problem are not limited to food processing and distribution – to just junk foods. Nutrient deficiencies are being traced back to the farm level. Herein lies the opportunities for farmers to support the revolution, to produce “good food” for everyone. A particularly revealing study was published in the *Journal of American College of Nutrition* in 2004. It compared nutrient levels in 43 fresh, unprocessed

garden crops in 1999 with levels documented in historic benchmark nutrient studies conducted by USDA in 1950. Declines in median concentrations of six important nutrients: protein –6%, calcium –16%, phosphorus –9%, iron –15%, riboflavin –38%, and vitamin C –2% were observed – even when measured on a dry weight basis.⁸ These were all unprocessed foods.

Various studies also have indicated that yield-enhancing technologies – fertilizers, pesticides, plant density, and irrigation – reduce the nutrient content of field crops.⁹ Agronomists have referred to this phenomena as “nutrient dilution.” It is a consequence of the industrial agricultural practices essential for economic efficiency, and the dilution takes place at the farm level. There are opportunities within the growing crisis of confidence for farmers who are willing and able to provide consumers with good, nutrient-dense foods.

One means of realizing this opportunity is to produce organic foods. A review by *The Organic Center* of 97 published studies, comparing organic and conventionally grown foods, indicated that “on average” organic foods are more nutritious than conventional foods.¹⁰ Conventional foods often contained more macro nutrients – potassium, phosphorus, and total protein – but organic foods were consistently and significantly higher in Vitamin C, Vitamin E, polyphenols, and total antioxidants, which are frequently lacking in American diets.

Organic food sales in the U.S. grew rapidly during the 1990s and early 2000s, averaging 20%-plus per year and doubling every three to four years. With the economic recession of 2008, growth rates declined and stabilized at around 10% per year, reaching \$31.5 billion in sales in 2012.¹¹ While organic sales still account for less than 5% of total food sales in the U.S., organic fruits and vegetables now claim more than 12% of their market – an impressive accomplishment in a nation with a long history of being addicted to quick, convenient, cheap food.

However, the organic movement changed as it grew. It began as a group of small, back-to-earth farmers and small, cooperative natural foods retailers. As organic sales grew, economic pressures brought a call for uniform national organic standards which would open up organic production and distribution to large, specialized farming operations and mainstream supermarkets. By 2007, the mainstream supermarkets and large natural food chains, such as Whole Foods and Trader Joe's, accounted for more than 90% of the organic food market.¹² Several of the pioneering organic farms and organic food processors were bought out by large industrial food corporations. Organic farming eventually became dominated by large, specialized, “industrial organic farms.” As organic foods became industrialized, thoughtful organic consumers increasingly looked to farmers in their own communities to ensure the integrity of their food.

The local food movement began with roadside stands, farmers markets, and CSAs. A 2008 food industry study estimated that sales of local foods had grown from \$4 billion in 2002 to \$5 billion in 2007 and were projected to reach \$11 billion by 2011.¹³ The local food movement is most visible in growing popularity of farmers markets and Community Supported Agriculture organizations or CSAs. USDA statistics indicate the number of farmers markets in the U.S. increased from 1,755 to 8,144 between 1994 and 2013, increasing more than four-fold in less than 20 years.¹⁴ Current estimates by the *Local Harvest*¹⁵ organization indicate there were 2,700 CSAs in the U.S. in 2009, compared with less than 100 in 1990.¹⁶

In summary, the crisis of corporate control has led to a crisis of consumer confidence which is fueling a “good food revolution” in American agriculture. The revolution began with organic foods, but as organics came under corporate control, it has evolved into local, community-based food systems. In local markets, relationships are personal and motivations are social and ethical – not just economic. The new approach to farming has many names in addition to organic and local, including biodynamic, holistic, bio-intensive, biological, ecological, and permaculture. However, these farmers and their customers all share a common commitment to creating a better food system that is capable not only of producing food that nutritious and healthful but also to making good food accessible and affordable for all, including those of future generations.

The full future potential of the good food revolution probably is most evident in local foods cooperatives or alliances between farmers and consumers. Examples include food buying clubs, local food networks, food box schemes, regional food hubs, and a variety of farmer-owned cooperatives. *Grown Locally*,¹⁷ *Idaho's Bounty*,¹⁸ *Viroqua Food Coop*,¹⁹ *Good Natured Family Farms*,²⁰ and *the Oklahoma Food Cooperative*,²¹ are examples. The Oklahoma Food Cooperative website lists 20 similar cooperatives in other states. The USDA Agricultural Marketing Service lists more than 230 multi-farm “food hubs.”²² By cooperating, farmers can offer a wide variety of local products with purchase and delivery options ranging from CSA shares to on-line orders of individual items. Cooperation allows farmers to better meet the needs of more people – both farmers and consumers – without compromising their ecological or social integrity. These new food systems range in scope from local to state or regional in size and from a dozen or so to hundreds of farmer/consumer members.

Various natural food retailing surveys have shown that approximately one-third of American consumers today are looking for alternatives to industrial foods, specifically foods that have ecological, social, and economic integrity, and their numbers are growing.²³ Over time, with supportive changes in public priorities and policies, regional, national, and global networks of sustainable, community-based food systems could well replace the industrial, corporately controlled global food system of today.

Regardless, the food revolution is not going to go away; it is driven by the global imperative to accept personal responsibility for the integrity and sustainability of the food system rather than trust the corporately controlled economy. The revolution may change in character as it evolves, but ultimately it must prevail. As Albert Einstein once wrote, we can't solve problems using the same thinking we used when we created them. We are in a time of crisis. We are being forced by perilous circumstances to make fundamental changes in ways of thinking that will make the world either better or worse.

Sustainable farming requires a fundamentally different way of thinking. Sustainable farms are not specialized and standardized: They are diverse, dynamic, individualistic, holistic, and interdependent. They rely on green plants to capture and store solar energy rather than relying solely on fossil energy. They regenerate organic matter and restore natural productivity of the soil rather than rely solely on commercial fertilizers. They use crop rotations, cover crops, intercropping, managed grazing, and integrated crop and livestock systems to manage pests as well as maintain the fertility of their soils. Wastes from the various enterprises provide inputs for

other enterprises. Sustainable farmers are able to reduce their costs by relying less on purchased inputs and more on labor and management, without compromising their ecological, social, or economic integrity.

Sustainable farmers maintain personal relationships with their customers rather than rely on impersonal market – because they value friendships. They have the courage to be trusting and kind in a society that consider such things to be idealistic and naïve. Farmers and their customers find a renewed sense of community at farmers markets, CSAs, and community gardens, and other direct marketing venues. Sustainable farmers give priority to their local communities in marketing their products and purchasing products and local consumers give priority to local farmers – both value community and society. Sustainable farmers don't maximize profits but are able to maintain their economic viability while strengthening local economies and communities.

Most important, sustainable farmers accept an ethical and moral commitment to preserve the natural productivity of their land and their communities by leaving both as good as or better than they found them. Sustainable farmers realize direct value from their relationships with their land and with people, not just the instrumental or economic value that extract. They work in harmony with nature, not just to maintain productivity, but also to respect their honored role as stewards of the land. They work in harmony with society, not just to create new markets, but to respect their honored role as responsible members of the human community.

In spite of record farms profits in the United States, American agriculture is in crisis. We simply cannot allow non-human corporations to control our food systems – locally, nationally, or globally. An agriculture controlled by corporations is unsustainable. Admittedly, the challenge of regaining control and achieving sustainability seems daunting. However, the logical response to this crisis is really not that complicated. All we really need to do is to return to our common sense of what gives our lives quality, purpose, and meaning – the things that brings deep and lasting happiness.

Certainly, we are physical beings; we have economic needs that must be met. We need food, clothing, shelter, transportation, and other necessities of life. However, we are also social beings; we need positive *personal* relationships with other people. We need to love and be loved. Finally, we are ethical or moral beings; we need to feel a sense of rightness and goodness about what we do and how we live, which comes only from a sense of purpose and meaning in life. We need to understand that what we choose to do or not do actually matters.

Certainly, we need to care about ourselves. But, it is not a sacrifice to care about others; caring and sharing make our lives better. It is not a sacrifice to respect the needs of future generations. Stewardship of the land and of society adds purpose and meaning to life and makes our lives better. We need only give our ethical principles and social values priority over our economic preferences. All we really need to do is return to being fully human – ethically, socially, and individually. *The crisis of control in American agriculture in creating opportunities for American farmers, not only to help built new and better food system but also to find a better way to farm and a better way of life.*

End Notes

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