

At What Cost?

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"From the Dakotas to the Texas Panhandle, the rural Great Plains has been losing people for 70 years, a slow demographic collapse. Without even the level of farmers and merchants that used to give these areas their pulse, many counties are also losing their very reason to exist, falling behind the rest of the nation in nearly every category as they desperately try to reinvent themselves.

"Will this be the last generation to inhabit the rural Great Plains?" asked Jon Bailey of the Center for Rural Affairs, a nonprofit research group in Walthill, Neb. Few people in Nebraska, which has 7 of the nation's 12 poorest counties, scoff at the question.

Government attention has only consolidated the trends, people in the small towns of the plains say, by subsidizing mega-farms that rarely create local jobs or contribute to merchants in the



region. Arguments about the miracle of the American breadbasket - harnessing market efficiency and technology to produce cheap food in stunning abundance - may resound globally, but they ring hollow locally. The rueful view here is that subsidies, however sensible in the macroeconomic sense, are gutting the plains ever more."

"Amid Dying Towns of Rural Plains, One Makes a Stand"

Timothy Egan, New York Times, 12/1/03

"There will not be an absolute end of agriculture in America or New York. The survivors will be high value, place-branded and niche markets. Land that has a good natural resource base and is not easily put to higher value may remain in agriculture.

We are heading toward a bimodal structure with a few very large producers and a larger number of small local niche marketers. Medium-sized farms will become fewer and will be a transitional group of small farms becoming large."

"The Future of American Agriculture and the Land Grant University" Cornell University, 4/2003.

"Sustainable development is a process of change in which the direction of investment, the orientation of technology, the allocation of resources, and the development and functioning of institutions meet present needs and aspirations without endangering the capacity of natural

systems to absorb the effects of human activities, and without compromising the ability of future generations to meet their own needs and aspirations.”

“Sustainable Development: Definition and Implementation Strategies”, Roy F. Weston, 1993

In February of 1999, we joined over a thousand other farmers in the huge auditorium at the Pennsylvania Association for Sustainable Agriculture (PASA) conference to hear an architect give the keynote talk. An architect?! What could an architect teach a bunch of sustainable farmers? As it turned out, what we learned that day from Dr. William McDonough of the University of Virginia has profoundly changed the way we view the world.

The gist of his message was this - The initial design of products or systems will largely define the outcomes, both intentional and unintentional. If we want an agricultural system to have certain desired outcomes, this must be included in the original design. Rather than installing physical filters at the end of a system to ‘catch’ the toxic effluent and mitigate the damage caused, we must install mental filters in the initial design to reduce waste, stop the toxins from being formed, and to enhance, rather than destroy, the natural world.

This past September, I was privileged to participate in an conference at which Fred Kirschenmann spoke on the future of American agriculture. All of his talk was profound, but the most impressive ‘take away’ message for me was a graph of the past 50 years. One soaring line represented “Agricultural Productivity” for Western-style agriculture has done truly remarkable things to increase farm output. However, an equally soaring line represented “Farm Input Costs” and at the bottom of the graph, sinking steadily toward the axis, was the depressing line representing “Farm Profit”.

With a scenario like this, it is hardly a surprise that the towns in the Midwest, as described in the above New York Times quote, are dying a slow and painful death. But we need to ask, was this part of the original design? Is it part of the current design for American agriculture?

One of our favorite adversaries to organic agriculture, Dennis Avery, of the infamous Hudson Institute, has recently released a ‘NEW’ certification program they call the ‘Earth Friendly/Farm Friendly’ program. Widely publicized to influential non-farmers, this program seeks to reward farms that practice “highly productive agricultural and environmental principles in the management and care of their dairy herds and specifically designed to increase feed efficiency and reduce nutrient excretions.”

What are these principles? Generally, they are the ones described by Fred Kirchenmann’s graph, heavy use of pesticides, antibiotics, hormones, expensive equipment, debt, fossil fuels, government subsidies, and as few employees as possible. Cows are milked three times a day, pushed to their productive limits with hormones and super-charged feed for the sole purpose of milk output, their fragile health under such stress sustained by continual antibiotics. Their massive output of manure is produced thousands of miles from where the crops are grown for their feed. Instead, the soil in which these crops are grown is fertilized heavily with synthetic

fertilizers and ‘need’ transgenic intervention, herbicides, insecticides and fungicides to survive in such an environment. In the 1940’s, the famous soil scientist from Missouri, Dr. William Albrecht, testified that the new use of synthetic fertilizers would create a need for new herbicides and other pest killers as the natural balance was invariably disrupted - was this indeed part of the original design? Is it now?

Now the Midwest towns empty out, the former farmers and their children leave because they no longer can find jobs in town, pay their taxes, support their schools, buy groceries at the local stores, eat at the local restaurants, attend the churches, and serve on county government. No longer are there enough volunteers for the local fire and ambulance squads, the PTA, the Zoning Board, the Meals on Wheels. No longer do the children learn to be strong responsible leaders through FFA and 4H. Store fronts sit empty downtown, tax money to repair and build roads dries up.



Downstream, aquatic life disappears in and at the mouths of rivers. Frogs and other animals are unable to reproduce, as many pesticides and industrial chemicals act as hormone disrupters, turning males into something in between. Topsoil runs into the streams or blows away, because there is no longer a diverse active population of microbes holding things in place, producing gooey glomelin, feeding and cooperating on and with each other. It takes over 500 years to form one inch of stable topsoil and it can be lost in minutes. Cancer, asthma, antibiotic resistance, divorce, demoralization, loss of biodiversity, bankrupt counties, contaminated soil, hypoxic zones, empty houses - the list goes on, you know many of the details already, these are the externalized costs of the current Western agricultural system, the costs that proponents of the system do not acknowledge and certainly don’t intend to pay for. But we must ask ourselves, are these outcomes part of the intended design for this system?

Farms can have both positive and negative effects on the community. These effects are economic, social, and aesthetic, for invariably farms will impact the environment, health and social structure of the surrounding community. Agriculture can benefit neighboring industries, such as tourism, or it can be a detriment. Agriculture can enhance water and soil quality, or it can create pollution and health problems that the community will pay dearly for. The community will either reap external benefits from the agricultural system, or it will reap external costs.

This doesn’t just happen, it is a conscious and unconscious choice. In his book, ‘Cradle to Cradle’, McDonough says that “Rather than being an aesthetic and cultural delight, modern agriculture becomes a terror and a fright to local residents who want to live and raise their families in a healthy setting. While the economic payoff immediately rises, the overall quality of every other aspect of this system is actually in decline.”

I recently heard a strong supporter of ‘Big Dairy’ in New York comment that “we have become very good at maximizing what goes in the front end of the cow, all the feed, medications, and growth stimulants for maximum milk production. But we really don’t know what to do with

what comes out the back end.” This massive waste of a potentially valuable input is not much different from what William McDonough describes in ‘Cradle to Cradle’ when he says that up to 90% of the products used to make durable goods in the United States become waste immediately. These waste products, largely in the packaging, could be valuable resources but instead they are immediately burned or buried, becoming a solid waste disposal headache and removed from further use. What a waste!

There is no reason that organic farming can’t meet all the simplistic criteria of this Hudson Institute program, as quoted above, and meet them far better than the more specific practices that this program seeks to sanctify. Organic farming can be highly productive, it is definitely more environmentally and farmer friendly, and certainly depositing manure on pasture is a much better way to reduce the impact of “nutrient excretions”. However, the Hudson Institute does make a point that the organic community must not ignore. The world has a heck of a lot of people needing to be fed, with more coming every year. For organic agriculture to become ‘the norm’ rather than a ‘niche market’, it must consistently provide enough food for all those bodies, sustainably, under a wide range of agricultural conditions, in a long-term environmentally friendly manner and without the huge price premiums we’ve come to expect. We all know the price of food has precious little to do with what farmers are paid, but if sufficient quantity and moderate price can’t be achieved with our current organic practices, what must we learn and adopt to make it happen? It is not impossible, nor is it necessarily undesirable. Certainly farmers and their employees must be paid fairly for their work (now that’s a radical idea!), but we also need to be able to produce the products that the Average Person will be willing to buy. Americans are notorious for their passion for a bargain, intrinsically believing that if it is cheaper, than it must be better. We idealists in the organic community are not going to substantively change that pervasive mindset. How do we balance the need for a sustainable farm income, a sustainable healthy environment, and the inherent rush for the bottom (price)?

As Christmas comes, few will be able to resist the lure of Walmart simplicity - there’s something there for everyone, it may not be durable, environmentally or socially friendly, but hey, it gets the job done with as little effort as possible. Especially those of us with children will be pushed to buy the latest designer T shirt, the hot new iPod (it is mighty cute!), or the most heavily advertised bit of garish molded plastic. To make our loved ones happy and to simplify our busy lives, we will become active participants, supporting what McDonough calls the ‘intergenerational remote tyranny’ of passing the intolerable external costs of the bad design of the current agricultural and industrial system on to future generations and to far distant Third World populations to cope with. That is the choice we’re making.

In closing, I want to pay tribute to my cousin, Steve, who died on November 29 at the age of 49. As a geologist, he spent his adult life working with the fertilizer and toxic waste cleanup industries, trying to find reasonable solutions to problems created by appallingly flawed design. In early November, he was diagnosed with a highly invasive, fast moving cancer that rapidly spread though his body. He leaves his wife, two school age children, parents, a sister, friends, and others, all of whom loved him and counted on him. Klaas’ family lived much the same story 25 years ago when his father died of cancer, leaving behind a half-grown family. How many other such stories do we have to hear before we start believing them?

There are some who say that we can “save the earth with pesticides and plastic”. Please keep in your prayers one family in California this Christmas who knows very well that the cost is simply too high.