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Preface

The essays in this collection have been written over the span of more than a decade. The various topics were suggested by the people who organized the sustainable agriculture conferences where they were presented. The essays address some of the most important questions of the sustainable agriculture movement: why did it begin, what is it about, and how can it succeed?

The sustainable agriculture movement emerged in response to a growing crisis in American agriculture, a crisis arising from the unintended social, ecological, and economic consequences of agricultural industrialization. Sustainable agriculture is about meeting the needs of the present without compromising the future, which requires harmony and balance among the ecological, economic, and social dimensions of agriculture. But sustainable agriculture also is about the pursuit of a desirable quality of life—materially, socially, and spiritually—rather than the pursuit of narrow individual self-interests. Finally, the sustainable agriculture movement can and will succeed as farmers, consumers, and citizens realize, one by one, that farming and living sustainably is simply a better way to farm, to work, and to live. Those who are actually farming and living more sustainably are proving that it can be done.

I have been involved with the sustainable agriculture movement since the late 1980s, when it was first publicly validated by the USDA Low Input Sustainable Agriculture program. During the decade of the 1990s, I represented the U.S. Department of Agriculture and the University of Missouri in facilitating and conducting sustainable agriculture research and educational

programs all across the country. During this time, and since retiring in early 2000, I have had the great privilege of making hundreds of presentations at various public events related to sustainable agriculture. Some of my earlier presentations focused on specific issues, such as agricultural industrialization, defining sustainable agriculture, niche marketing, and sustainable community development.

In the mid-1990s I discovered an interesting pattern in the historic writings of Thomas Paine, a prominent pamphleteer during the American Revolution. He always began his pamphlets with an indictment, by stating what was wrong with the way things were. But he always went beyond the indictment to articulate his vision of how things ought to be. He then finished each pamphlet with a message of hope, stating what needed to be done to make things the way they ought to be. The essays in this book reflect this pattern: the crisis, the opportunity, and the hope for the future.

This book as a whole tells the story of sustainable agriculture in America in its varied dimensions and from a variety of perspectives. I certainly do not claim to be an expert on Canadian agriculture, but I have averaged three to four speaking engagements in Canada per year over the past ten years. While I have observed significant differences between Canadian and U.S. agriculture, I believe the current challenges and opportunities for Canadian and U.S. farmers are very much the same, particularly with respect to sustainability.

This book presents a significant number of essays, each addressing the whole of sustainable agriculture, but within a specific context and oriented toward a specific audience. Sustainable agriculture is a holistic concept; it cannot be understood by dissecting it, examining it piece by piece, and then putting the pieces back together. A sustainable agriculture is a living system; it is individualistic, site-specific, and dynamic. Thus, sustainability must be assessed within a specific context of people, place, and time. Sustainable agriculture is diverse, and thus cannot be

captured in a few examples or studies. Together, these essays tell a single holistic story of a dynamic and diverse sustainable agriculture.

The story begins with the essay “Crisis and Opportunity in American Agriculture,” which establishes the theme and the pattern for the other essays and for the book as a whole. After reading the first chapter, readers should be able to skip to any section or any chapter of the book, if they prefer. Each essay stands on its own as a whole within a whole, although some sections of some essays have been edited and condensed to minimize duplication. The essays are organized in a logical progression and are mutually supportive or interdependent, but no essay is necessarily dependent upon another.

Each of the book’s five sections contains three or more essays that share common themes. The first section focuses on the crisis, the industrialization of agriculture. The next two sections address the opportunity, first in general and then more specifically in terms of sustainable agriculture. The final two sections outline a new vision of hope for the future. The fourth section focuses on the hope for sustainable farms and rural communities and the last section emphasizes the hope for a sustainable food system and a sustainable society.

The knowledge and learning reflected in this book was acquired in large part from my interaction with farmers, consumers, and interested citizens as I traveled back and forth across North America. The knowledge acquired at each venue contributed to a continually evolving paradigm of sustainable agriculture, as each new presentation provided an opportunity to test new propositions or hypotheses. Over time, the ideas that worked—that were logical, relevant, internally consistent, and capable of being communicated—were added to a growing understanding of sustainable agriculture. Ideas that were not internally consistent, relevant, or grounded in reality were quickly challenged, reexamined, and either revised or discarded. The story of sustainability is a continually evolving story.

Some readers will appreciate the indigenous knowledge, evolving paradigm, and farmer-tested ideas upon which these essays were based. Others may value the book more as a source of inspiration and hope than a source of new information or knowledge.

A growing number of people understand that social and spiritual values cannot be omitted from the study or practice of sustainability. Sustainable agriculture is rooted in science, but it is equally rooted in values and ethics. I hope this book encourages other scholars to integrate science, values, and ethics and to share the resulting knowledge with others. The sustainable agriculture movement is perhaps most important because it is guiding us all toward a better way of life.

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Crisis and Opportunity in American Agriculture

North American agriculture is in crisis. Until recently, the crisis had been a quiet one. No one wanted to talk about it. 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, it was a sign of progress.¹ Those who failed were simply the victims of their own inefficiency, their inability to keep up with changing times, their inability to compete. We have no more reason to be concerned about the demise of the family farm than we were about the mom-and-pop grocery store or the family-owned restaurant. We can't stand in the way of progress, they said.

With farm prices at or near record low levels for 1997, 1998, and 1999, even the agricultural establishment began to realize that something was wrong. The U.S. Congress passed emergency farm legislation each of those three years, pushing U.S. farm subsidies to all-time record levels. But even then, the farm crisis was being blamed on such things as weather problems, loss of export markets, or unwise public policies.

In general, we are led to believe that our farm problems are someone else's fault. The crisis is a simple matter of supply and demand, we are told. The only solutions being seriously proposed are to tinker with government policy, or better yet, to simply wait for markets to recover. In the meantime, the only alternatives farmers are being offered are to get big enough to be competitive, get a corporate contract to reduce risks, or get out of farming.

Eventually, prices for agricultural commodities will recover, at least for a year or two. Weather problems in a major ex-

porting country will tighten global supplies, a crop failure in a major importing country will spark global demand, or changes in financial markets will shift global trade patterns. Agricultural markets are inherently unstable. However, a year or two of profitable prices will do nothing to resolve the underlying problems of American agriculture.

In a recent book, *The End of Agriculture in the American Portfolio*, University of California economist Steven Blank envisions the imminent end of the American farm.² His conclusions regarding agriculture in the United States would seem to be equally applicable to agriculture in Canada. American agriculture is coming to an end, he argues, but he claims this should be no cause for alarm. He contends that the end of agriculture in America is the result of a natural process that is making us all better off. He foresees a time in the not too distant future when North America will import nearly all its foodstuffs from other, “lesser developed” countries. Costs of land and labor will be too high for American farmers to compete in global commodity markets. He argues that globalization of the food system is not some corporate conspiracy but is simply the inevitable consequence of the individual struggles of farmers and agribusiness in America and around the world who quite logically are pursuing their individual self-interests, which ultimately will benefit society in general.

Blank believes that the current open spaces of rural areas will be transformed from farms to residential developments to accommodate a growing and increasingly affluent population fleeing the problems of urbanization. Cornfields will be unable to compete with condominiums for farmland. Farming is a low-skilled *primary* industry that has no place in an advanced high-tech economy. Rural ways of life will give way to urban ways of life, as farms become residential ranchettes. Virtual communities of people interconnected by the Internet will replace real communities of people who meet face to face in church or at the grocery store. Communities of interest will replace com-

2 *Crisis and Opportunity*

munities of place. Agriculture will no longer be a significant factor in the rural economy. Most people in the community will be employed elsewhere—perhaps by companies thousands of miles away. Blank claims the only forms of truly sustainable agriculture will be those compatible with urban life—mainly golf courses, plant nurseries, and turf farms.

Blank's fundamental arguments are based on the premise that economic considerations ultimately will prevail over all others. He assumes that industrial agribusinesses will replace family farms because they are more economically efficient and that American agribusiness eventually will be displaced by even more efficient agribusiness elsewhere in the global economy. Residential ranchettes will replace rural farmsteads because people with high-tech jobs can pay more for land to look at than farm families can afford to pay for land to work on.

Blank might well be right, if we allow short-run economic thinking to continue to dominate every aspect of our lives. The current crisis in agriculture might well foretell the end of North American agriculture. However, the end of farming in North America is neither inevitable nor desirable. There are sound logical, ecological, and social reasons to keep farm families on the land and for every nation to maintain the integrity of its agricultural sector. We need not sacrifice our national food security and our quality of life for the sake of short-run economic efficiency. But we may 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.

American agriculture is at a time of crisis. Crisis is most frequently considered something negative, something to be avoided, such as pain, distress, or disorder. However, crisis can be defined more generally to be either positive or negative. A crisis is a decisive moment, a critical time, or state of affairs whose outcome will make a decisive difference for either better or worse.³

The current crisis in agriculture most certainly is a time of pain, distress, and disorder for farmers and rural communities. However, it is also a time of opportunity—a critical time and state of affairs that will make a decisive difference, either for better or for worse. Rather than passively accept whatever might happen, it's up to us—to farmers and others—to confront the threat, seize the opportunity, and create the kind of agriculture and human society that we want.

To seize the opportunity, we first must be willing to confront the crisis. The current crisis in agriculture is not a consequence of the weather, world trade problems, or unwise government policies. These things only magnify the symptoms of problems that are rooted in causes far more fundamental. Crisis is a chronic symptom of the type of agriculture we have been promoting on this continent for at least the past fifty years—symptoms of an industrial agriculture. Reoccurring financial crises are the consequence of our encouraging farmers to industrialize—to become more specialized, standardized, and larger in scale to make agriculture more efficient. We rationalize the industrialization of agriculture as a necessary means of providing lower-cost food for consumers. We rationalize the displacement of family farmers in the process as a necessary means of “freeing people from the drudgery of farming” so they can find better jobs elsewhere. We are led to believe that the benefits far outweigh any costs.

The promise of profits is the bait that keeps farmers on the treadmill of industrialization. Farmers adopt new cost-cutting and production-enhancing technologies to increase profits, but the resulting increases in production cause prices to fall, eliminating the profits of early adopters and driving the laggards out of business. This technology treadmill has been driving farmers off the land for decades. Those remaining on the treadmill after each crisis must run faster and faster to survive. Soon they don't have enough time for their families, let alone their communities. They can't afford to care too much about their

neighbor because they know they will soon have to have their neighbor's land in order to survive. Inefficiency and reluctance to change are not the causes of failure among American farmers. Failure is an inherent part of the current system of farming. Some farmers must fail in order for others to succeed, and after each crisis, there is room for fewer survivors.

Chronic crisis in American agriculture also has meant chronic crisis in America's rural communities, as farms have become more specialized, larger, and fewer. The fundamental purpose of most rural communities was to support those engaged in agriculture, and thus the communities were supported by those involved in agriculture. It takes people, not just production, to support a community. People buy automobiles, appliances, clothes, and haircuts on the main streets of farming towns. Larger farms tend to bypass rural communities when buying their production inputs and marketing their products. In addition, a rural community is far more than a rural economy. It takes people to fill the church pews and school desks, to serve on town councils, to justify investments in health care and other social services, to do the things that make a community. As farms have grown larger and fewer, rural communities have lost people—human and social resources—and many rural communities have withered and died.

However, the current crisis is different from others in at least one respect: it signals the final stage of industrialization. The final stage is consolidation of decision making under corporate control. The giant multinational corporations are now seizing control of all aspects of American agriculture, moving beyond specialization and standardization, beyond consolidation into larger farms, and are now consolidating agricultural decision making into the boardrooms of a handful of multinational corporations. This final stage of industrialization is turning once peaceful farms into odious factories, with all the noxious odors, environmental degradation, and inhumane working conditions that characterized heavy industry of earlier times. This final

stage of industrialization is turning remote rural communities into the dumping grounds for the rest of society—whether for prisons, landfills, toxic waste dumps, or giant confinement animal factories. This final stage of industrialization could well spell the end of the American farm, and with it, the end of the American rural community.

The corporatization of agriculture in the United States came first to the poultry industry. A handful of larger corporations now control poultry production from genetics to the supermarket, and there are virtually no independent producers left. Hog production is rapidly following in the footsteps of poultry, with corporate ownership and contract production becoming the norm rather than the exception. Dairy will likely be the next sector to industrialize, as the current trend toward large-scale production will quite likely be followed by corporate control, or corporate-like cooperative control. Biotechnology will bring corporate control of grain production, as genetic engineering is used to create specific characteristics of food products made from grain. Producers will then have to grow crops with approved genetics in order to have a market, and biotech corporations will hold the genetic patents. A grain farmer who doesn't sign a corporate contract simply won't have a market.

It's not a matter of economies of scale any longer but instead a matter of market control. Market control translates into profits. Poultry producers have proven that if a few corporations can gain control of a sufficiently large share of an industry, they can stabilize supplies on the backs of their contract producers and can maintain corporate profits indefinitely. During the consolidation phase, however, corporate producers are not concerned with maximizing profits. The lower the price, the faster independent producers will be forced out of business and the faster the large corporations can gain market share. As corporations gain market share, they can deny market access to lower-cost independent producers and ultimately gain control of the market, even if they are less efficient than are

independent producers. When they get control of the markets, they can quickly recoup any losses incurred during the period of consolidation.

As American agriculture comes under corporate control, it will respond even more quickly to global markets; multinational corporations have no sentimental attachment to any particular farm, geographic region, or nation. If costs of land and labor are less somewhere other than in North America, as they almost certainly will be, then that's where our food will be produced. Capital and management can be shifted easily from North America to other regions around the globe, as we have seen in the production of other industrial goods. North America's farmlands will be sold to the highest bidder, which is likely to be land speculators, and most rural communities will continue to wither and die as they await some future economic revival such as becoming bedroom communities for affluent urbanites.

The food and fiber industry most certainly has a future. People will always need food, clothing, and shelter, and someone will provide these things. But there will be no future for farming in North America, or for rural farming communities, unless we challenge the conventional wisdom that food should be produced wherever on the globe it can be produced at the lowest cost and that free markets should be the final arbiters of all value. In fact, there will be no future for farming anywhere—not true farming—unless we find the courage to challenge and disprove the conventional wisdom that farmers must get bigger, give in to corporate control, or get out. There are better alternatives for farmers and for society if we can find the courage to challenge the basic forces driving the corporatization of agriculture and of North American society.

Thankfully, the crisis in agriculture also brings with it opportunities for decisive, positive change. The opportunities arise from the failures of corporate industrialization. Economists argue that cost-reducing technologies and the pursuit of