Farming: '... an industry like any other' ?

I would argue that the nature of modern economics has been substantially impoverished by the distance that has grown between economics and ethics. — Economist Amartya Sen

At our third and final "urban conversation" April 15 in West Des Moines, a farmer in the audience declared that farming is "an industry like any other." He went on to say that farming was not a lifestyle, implying that farmers had no social responsibility other than to produce as much food as cheaply as possible.

It is increasingly common to hear farmers make such statements. And it's easy to understand why they have come to this conclusion. For at least the past half century, we have been telling farmers that all we want them to do is to produce as much food and fiber as possible, as cheaply as possible. We have told them they must specialize and streamline their operations and at the same time we have invented the technologies to do so. Then we told them they had better "get big or get out."

Is efficiency enough?

In other words, our culture has told farmers to become part of our larger Industrial Age effort that consolidates industrial activities to achieve efficiency and produce goods and services as cheaply as possible without paying any of the external costs.

So how can we object when a farmer claims that his farm is an industry like any other?

How can we complain when industrialized farms pursue this objective even when they cause environmental or social damage?

If other industries profess that they cannot compete in a global economy when environmental regulations are too strict, or they are required to provide workers with health insurance, then how can we protest if our farms cause environmental degradation or tear at the social fabric of our communities?

We must question at least two assumptions behind this industrial mindset that apply to both farms and factories.

Farms are not factories

First, farms and factories are not equivalent from a biological perspective. While both are subsystems of the ecosystems in which they operate, farms are biological organisms. Factories are not. Farms are an intimate part of the interdependent biotic community in which the farm exists. Factories are not. The health of a farm depends on the health of the ecosystem in ways that factories do not. When soil quality deteriorates or pollinators disappear, a farm's productivity is immediately affected. A factory's is not. A farm is not an industry, but may be more accurately described as a **habitat**, as suggested by Laura and Dana Jackson in their new book, *The Farm as Natural Habitat.*

Yet, since the early 1950s we have largely managed farms and factories as if they were identical enterprises. We used external inputs to fuel both systems, capitalizing on the availability of cheap fossil fuels. On our farms we substituted fossil fuel inputs for the many biological functions integral to the biology of a farm. Fertilizer replaced soil nutrients that naturally accumulate on well-managed farms as a result of biological functions. Pesticides replaced natural pest-suppressing functions such as balanced predator/prey relationships and sound habitat management.

As supplies of fossil fuels are depleted, we may need to rethink both farming and factory systems. Masae Shyomi and Hiroshi Koizumi point out in their recent study, *Structure and Function of Agroecosystem Design and Management* (2001), that fossil fuel-based systems of farming are rapidly coming to an end and must be replaced. They argue that the most probable alternative is a system based on "proper interactions operating between crops/livestock and other organisms," in other words, perceiving a farm like a habitat.

Diversity, knowledge decline

Having used industrial, fossil fuel-based methods almost exclusively for more than 50 years, however, we have dramatically reduced the diversity of species as well as the knowledge about their interaction and interdependence. Shyomi and Koizumi predict that redesigning farms as healthy, functioning habitats will, consequently, be a challenge.

Factories can no longer be managed as industries in the conventional sense, either. Factories also push the limits imposed by the depletion of fossil fuels and by the environmental damage stemming from that system. Recognizing this, the Ford Motor Company recently invested $2 billion to install a "living roof" on its factories, planting it with sedum plants and installing wetlands. This has turned the roof into a "ten-acre garden" expected to lower energy costs, reduce the need for artificial light, and filter water for reuse in the factory. The Ford Motor

DIRECTOR

(continued on page 4)

Here's how the budget ax has fallen at the Center

The Leopold Center has two lines of funding. The primary source is the Agricultural Management Account (AMA) of the Groundwater Protection Fund created by the 1987 Iowa Groundwater Protection Act. The legislation set a fee on sales of nitrogen fertilizer and pesticides to support nearly 20 environmental programs, which includes the Leopold Center. The Leopold Center's average annual revenue from the AMA fund, based on the last five years, is about $1.2 million.

The Leopold Center's second source of funds is a line item appropriation from the legislature's educational funding, or General Purpose Revenue (GPR). The Leopold Center's average annual GPR income, based on the last five years, is about $569,000.

The Leopold Center has maintained a financial reserve that allows us to honor FY 2003 commitments for research already approved and in progress. This allows researchers time to finish the projects or find other support for their work.

Since 1988, the Leopold Center has issued a Request for Proposals (RFPs) for new projects every year. No new RFPs will be issued until further notice. The Center also has eliminated funding for its educational event grant program and pilot educational programs, and will not hold any statewide conferences.

Grants from outside groups may be in jeopardy due to the Leopold Center's uncertain future and inability to assure adequate matching funds.

Leopold Center Budget Cuts

	FY 2002*	FY 2003**	TOTALS
AMA	$250,000	$1,000,000	$1,250,000
GPR	$35,700	$56,300	$92,000

* FY 2002 runs July 1, 2001 through June 30, 2002.
**FY 2003 runs July 1, 2002 through June 30, 2003.

NOTE: The $1 million cut from the Leopold Center's AMA account was approved during the May 28, 2002, special session. The money will be transferred to the state's General Fund. All figures are current as of presstime.

Economic efficiency tied to economic power, economic freedom

DIRECTOR *(continued from page 3)*

Company seems to be saying that we need to begin running our industries like any other farm!

Beyond economic efficiency

A second assumption—deeply rooted in both our farm and factory operations but seldom acknowledged—is the economic philosophy by which our contemporary industries function. We have assumed that the only principle to guide us is "economic efficiency." Nobel Prize-winning economist Amartya Sen calls this the "engineering-based" approach to economics. That approach, he points out, is primarily concerned with the "logistic and engineering problems **within** economics," which ignores the wealth or well-being of society except to **predict** that such well-being will somehow automatically be served. He also points out that such predictions are based more on theory than on empirical verification. Observation tells us that increasing economic efficiency has done little to increase a farmer's wealth and well-being.

It is interesting to note that many of the classical economists did not see economic efficiency as the **only** means to generate wealth. Classical economists such as Adam Smith insisted that economic **freedom** and economic **power** were as important as economic **efficiency**. Smith was concerned that both the disproportionate economic power of the mercantilists (a powerful group of highly consolidated merchants who obtained favorable government rulings) and the absence of economic freedom for entrepreneurs prevented Scottish society from achieving true economic efficiency. Smith's analysis suggests that neither farm nor factory can serve society well unless democratic economic rules exist to create the framework for a free society.

More than 200 years later, Sen argues that this is why ethics are essential in economics. Economics without ethics, he suggests, makes for poor economics, and ethics without economics makes for impotent ethics. The fact that Adam Smith was a moral philosopher seems to be lost on neo-liberal economists.

Recognizing that farms are biological organisms not factories, and that economic efficiency does not, by itself, lead to social (or fiscal) prosperity, are two issues that need our attention. Farmers—and the rest of society—should not naively assume that their farms must be operated like factories ofthe industrial era, especially when factories seem on the verge of recognizing that they may need to be redesigned to operate more like the biological farms of the future.

Much of the current consolidation, which reduces farmers to "serfs on their own land" (as *Time* magazine in 1992 described poultry producers who raised chickens for Tyson), has little to do with free market competition or efficiency. As ISU economist Neil Harl recently put it, "It's about power, exploitation of market power." He goes on to add that as firms become more concentrated "they no longer pass along the benefits to the consumer." It seems that neither the well-being of farmers nor consumers is well served by our obsession with economic efficiency.

Rethinking the assumptions

Simply declaring that consolidation of power and the loss of economic freedom are inevitable due to free-market forces, as neo-liberal economists often do, is dishonest. It is arrogant to assert that economic efficiency alone matters in a free market economy, especially when public policies are then developed to support this false assumption.

We must begin with the proposition, as the classical economists did, that we not only need economic efficiency, but also an ethic that establishes a high degree of economic freedom and an appropriate balance of economic power among all players in the marketplace. We could then develop consistent public policies designed to produce outcomes that serve the general well-being of society—including farmers.

These are issues that farmers, and the rest of society, need to ponder before they glibly accept the notion that a farm is "an industry like any other."