

The Real Economics of Factory Livestock

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Livestock factories are taking over the U.S. livestock-meat industry. In spite of growing opposition, the number and size of large-scale, corporate-owned, factory-like livestock operations continues to grow. Consequently, the number of smaller, independent, livestock farming operations continues to decline. Large, corporate feed lots have dominated cattle feeding for several decades. In 1998, for example, the largest 30 cattle feeding operations had pen space for nearly 5 million head of cattle - roughly half of the total number of cattle on feed at any given time over the past few years. Hog production, on the other hand, was almost entirely independently owned as recently as a decade ago. But, today the 50 largest hog operations control over half of total hog production, mostly through contractual arrangements. There is talk in the industry that contract beef cowherds will be next. Within a decade, an independent, non-contract producer of cattle or hogs may be a rarity.

Economics of Self-interest

Many believe that further industrialization of livestock production is not only inevitable but is desirable -- for producers and consumers alike. Those who defend these factory-like operations typically base their positions on short-run economic considerations. They point out that the industrialization of livestock production - through specialization, standardization and centralization of control -- is being driven by the free market system. They claim that large-scale, specialized operations have lower production cost - that they realize significant economies of scale. They say that consumers are demanding a more consistent quality product and are willing to pay for it. They conclude that new technology in breeding, feeding, and housing of livestock is making these large-scale operations more efficient in meeting consumer demand, and thus, they are more profitable.

The proponents say that rural communities should welcome these large-scale corporate livestock operations as engines of economic development. Investments in livestock factories create jobs and enhance local tax bases in economically depressed rural areas - just like any other factory. After all, such areas don't have a lot of other development alternatives, and these big operations are going to locate somewhere. Family farms have not saved rural communities in the past, so communities must look elsewhere for the future. They reason that if these factory operations are more cost efficient than the smaller, family operations, even if marginally so, then traditional family farmers will inevitably be forced out of business anyway.

On issues of the environment, supporters reason that if problems arise, it will be easier and less costly to work them out with a few large operations than with many small ones. The big operations have the money to invest in the modern waste handling facilities that ultimately will be required of everyone. Many smaller farmers don't. They admit that concerns for odors may be legitimate for those living nearby, but there are always costs associated with anything that generates benefits. No one wants a hog farm in their "backyard," but they have to be somewhere.

The thing that gives these arguments a ring of truth is their common foundation in the economics of short-run, self-interest. They are based on a deeply held faith that the promise of more profits, no matter how small, is the best means of allocating resources - whether it is allocation of people among alternative occupations, land among alternative uses, money among investments, or people among communities. Unfortunately, we have become a society where the pursuit of short-run economic self-interest is treated as a God-given right.

If short-run economic thinking prevails, there is every reason to believe that livestock factories will totally dominate animal agriculture in America within another decade. And, corporations will locate their livestock factories pretty

much wherever they choose, regardless of the ecological and social consequences. They probably will avoid locating them in heavily populated areas to minimize nuisance lawsuits. But, money invested in factory livestock will seek its place of highest return, regardless of where that may be.

The only way to successfully challenge this outcome is to challenge its basic premise -- that short run profits should take precedent over the long run well being of people. The economics of short-run self-interest should be not allowed to dictate either private or public decisions. The legitimacy of livestock factories must be challenged at its economic foundation. Ultimately we must successfully challenge the legitimacy of the economics of narrow short-run self-interest as a guiding principle. But, we can begin by challenging the validity of the economic claims of proponents of large-scale, corporate livestock operations.

Industrialization is not Market Driven

Proponents of large-scale, corporate operations claim that they provide a lower cost means of production. First, they may have lower cost than the "average" cost of smaller, independent operations - maybe as much as five percent lower, but they do not have lower costs than many independents. In other words, the factory operations are competitive because they have lower cost than "most" existing independent operations. But, it is also true that many independent producers have lower production cost than do the large, corporate operations.

For example, actual farm records routinely summarized by Midwestern universities have consistently shown that anywhere from 20 to 40 percent of independent commercial hog producers have cost of production lower than costs for the large corporate operations. So a well-managed, smaller, independent hog operation can compete cost-wise with the most efficient of the large operations. If all independent operations were managed as well as the top 20 to 40 percent, hogs could be produced at a lower cost on independent, commercial hog farms than in the large-scale corporate operations. Smaller operations are going out of business because they are losing access to competitive markets -- not because they can't compete on cost.

Proponents also argue that consumers will benefit from lower-cost factory livestock operations. Even if they do, it won't be by enough to notice. Consumers spend just a little over a dime of each dollar of their disposable income for food, and beef and pork make up less than 15 percent of the total. Producers get only a small portion of what consumers pay at retail. The farm value of pork accounts for around 35 percent total retail cost (closer to 20 percent in 1998), and the farmers' share for beef is close to 50 percent of retail. So any realistic difference in farm level costs would have relatively little impact on retail meat prices and even less on consumers' total food costs.

For example if production costs, on average, were five percent less for large operations; say \$2/cwt for live hog and \$3.50/cwt for fed cattle; the "maximum" savings to consumers would amount to only about *two cents per dollar* spent for beef and pork at retail. At best, total food costs would be *three-tenths of one percent* less and consumers on average would spend only *three-one-hundredths of one percent* less of their income for food. Any savings would be lost in rounding errors in consumer food cost statistics. With a handful of large corporations gaining control of the livestock and meat industry, it seems far more likely that in the long run meat prices would go up rather than down as a consequence of further industrialization. They wouldn't want to control the market unless they intended to make larger profits - higher corporate profits would drive consumer prices up, not down. The only ones who really need to shave another penny or two off production costs are those who are trying to export more meat into highly competitive world markets. That doesn't include many family farmers or consumers.

Proponents argue also that the trend toward large-scale, corporate livestock operations is driven by consumer preferences. Meat from factory operations may well be more uniform because it all comes from the same basic genetic stock and is produced using very similar feeding management practices -- as is currently the case for poultry. Consumers do want consistency in their products -- they want a food product, such as a choice steak, to have the same eating qualities each time they buy it. However, that does not mean that all consumers want the same thing - that we would all prefer the same steak or pork chop.

People are different. Consumers have different tastes and preferences - different perceptions of quality. Making all pork or beef "the same" would not necessarily please more consumers, because they all don't want the same things.

The poultry people brag about the great variety of products they offer to consumers. They realize that people want variety, and so, they try to create the illusion of consumer choice. But, the fact of the matter is that all this so-called variety is nothing more than the "same generic chicken" cut up, packaged, and processed in dozens of different ways. Greater profit for producers and processors, not consumer satisfaction, is the real driving force behind the current trend toward industrial meat production.

Supporters claim large-scale operations are simply responding to incentives arising from free markets, that it's the promise of profits that is driving the current trend toward industrialization - that's what made America great. The motive most certainly is profits, but it most certainly is not to make profits by supplying free markets. Instead corporate producers are doing everything they can to free themselves from any free market forces that might tend to limit their profits. The poultry industry serves as a model to the pork and beef industries. Once all stages of production, from live animals to the retail meat case, are controlled by a handful of corporate firms they will be able to stabilize supplies and prices at higher and more profitable levels. When shifts in market conditions require supply adjustments to maintain profits, the negative consequences of such adjustments will be shifted to their contract growers. That's not free market competition and that's not what made America great. Control of markets, not free markets, is the driving force for industrialization of livestock.

Livestock Factories are not Good for Rural Communities

Livestock factories promise badly needed jobs for economically depressed rural areas. When a large, corporate livestock operation locates in a rural community, there almost certainly will be more jobs available in that community than before. But, the overall quantity of meat demanded by consumers will not expand just because corporate operations take control of an industry. If anything, demand for red meats has declined since beef and pork production has become more consolidated. So each hog or steer sent to market from a factory livestock operation means a market for one less steer or hog from an independently owned operation. Every time factory livestock takes a larger share of a market, independent livestock producers lose market share.

The job creation claim is at best only true in a narrow sense because, on balance, industrial livestock operations destroy more jobs than they create. Different studies report estimates of from one-and-a-half to three independent hog producers lost for every job created by industrial hog operations. The specific numbers depend on the underlying assumptions, but the conclusion that more jobs are destroyed than are created relies only on common sense. A fundamental principle of industrialization is the substitution of capital and technology for labor and management - to make it possible for fewer people to produce more. Large-scale operations simply concentrate the jobs created in one place and call it economic development while the larger numbers of jobs lost elsewhere are ignored or denied. In total, numbers of independent livestock producers displaced will most certainly be greater than the number of jobs created in new large scale, corporate operations. North Carolina and Missouri led the nation in the rate of increase in hog numbers as they led the nation in rate of decline in hog farmers.

Proponents argue that livestock factories offer better jobs than does farming. The risks may be less and the pay may be steady, but most livestock factories pay little more than minimum wage. In other respects, factory jobs are clearly less desirable than farming. Factories "use up" people. Assembly line work is "non-thinking" work. When you work on an assembly line, you simply do what you are told as fast as you can for as long as you can. Ask anyone who has been there. Large-scale livestock operations may not look like factory assembly lines, but the principle is the same. Big hog operators, for example, don't want people who know anything about raising hogs. They want people who can be trained to do what they are told to do without thinking. An experienced hog farmer might start thinking, asking questions, and mess up their process. Livestock factories, like other factories, are looking for people who are dependable, who know how to carry out orders, and will work hard for a little money.

In addition, a large confinement livestock facility is not a pleasant or healthful place to work. For example, known health risks are associated with continuously breathing air that arises from manure pits in confinement hog facilities. Health problems cost money in lost wages and health care costs. But more important, an unhealthy workplace can destroy peoples' lives. So why do people accept such jobs? History has proven that people will choose to work in dangerous work environments when they are desperate for work. Many rural people are desperate.

Supporters of corporate farming contend that contract production provides a way for farmers to continue farming under difficult times. Contract production may be a way to continue producing livestock, but contract production, in concept, is no different from working in a corporately owned facility. When a farmer signs a comprehensive production contract, they have turned all of the thinking over to someone else. The farmer may own the production facilities, but the corporation makes all of the decisions - genetic selection, feeding and medication regimes, timing of placement and delivery, etc. The farmer becomes just another hired hand carrying out the company's instructions. Once the farmer signs a comprehensive production contract, he or she may have a job on the farm, but they are no longer a "farmer."

Other kinds of factories have come to rural America in the past. When these factories have found people in other regions, or in other countries, who would work even harder under more dangerous conditions for less, they moved on. Corporately owned factories have no roots. They leave behind a workforce that doesn't know how to do anything other than what they are told. Intelligent, thinking, capable, independent people are transformed into detached, non-thinking, possibly disabled people who may be psychologically incapable of earning a living without depending on someone else to tell them what to do. Adam Smith even warned of such an outcome in his landmark book on economics, *The Wealth of Nations*. Our cities currently are plagued with such people -- people whose capacities have been degraded by factories long since gone. It just doesn't seem to make sense to do the same thing to rural people. The truth is that when we replace independent, family farmers with livestock factories we are degrading the most valuable resource rural areas have to support their future development - rural people.

Livestock Factories Degrade the Natural Environment

Well-financed corporations may be more capable of dealing with any environmental problems that arise from confinement animal feeding operations, but they are far more likely to create problems than to solve them. They typically are better financed and have access to technologies that may not be feasible for smaller operations. But, large-scale operations are inherently more threatening to the environment than are small-scale operations, and thus, create more problems than they can solve. In fact, the large operations might well lose any competitive edge they now have if they were forced to invest in appropriate environment-protecting technologies.

If animals are scattered out across the landscape -- as in small family farming operations -- with animals running free on pastures, letting their manure lay where it falls, they really don't bother anyone very much. Ten thousand animals spread across ten thousand acres isn't a problem, but ten thousand animals in a five-acre feed lot may create an environmental nightmare. When a large numbers of animals are placed in a confinement facility, environmental problems are created that simply did not exist when livestock were produced on pastures.

Even when diversified livestock/crop farms have feed lots, livestock manure normally is spread back onto cropland where the feed grain was grown. Most of the nutrients used to grow the crops are returned to the soil. But, when feed grains from specialized crop farms are shipped to distant livestock factories, the nation's future productive capacity is being stacked up and flushed out into places where crops can't grow. We can treat the symptoms - air pollution and water pollution - but the basic problem of piling up too much stuff is inherent within the system of large-scale, concentrated production.

Once you start collecting manure, flushing it, spreading and spraying it around - all normal practices in confinement animal feeding operations - it becomes pollution. It pollutes the air with foul odors and pollutes water through leaching or runoff. Air pollution and water pollution are symptoms of the same basic problem -- too much manure in one place. For example, the difference between the hog lagoon spills, such as those occurring in Missouri and North Carolina in recent years, and the normal runoff from a hog pasture is a simple matter of concentration. When you put a lot of hogs in the same place, you have to collect and store the waste. If it gets into the ground water or gets flushed into streams, it kills fish, clogs streams and lakes with algae, feeds water born disease organism, and wreaks havoc on the environment.

Supporters of the concentrated feeding operations claim that less intensive production methods, such as producing livestock on pastures, will require more land to produce the same amount of food and fiber, and thus, will require use of land that might have been set aside for wildlife or other ecological uses. First, each pound of meat that can be

produced on pastures is a pound of meat that will not require land to be used for feed grain production - the single largest claimant of agricultural land and biggest user of agricultural pesticides. In addition, whenever grain feeding is required in producing an acceptable product, livestock can be fed out on small, diversified farming operations. Wildlife habitat can be an integral aspect of such farming operations - farming and wildlife sharing the same spaces. Many species of wildlife do not require isolation from people, but only require isolation from the destructive actions of people - such as factory farming. There is nothing to indicate that ecologically sound livestock would leave any less wildlife habitat than would livestock factories - in fact there are strong arguments to the contrary.

Proponents who admit inherent environmental risks with factory feedlots claim that it will be easier to monitor the problems with a few big feed lots than with thousands of small farmers. However, the "need" to monitor is linked directly to the large-scale, corporate nature of many of today's livestock operations. Small family-based operations might require far fewer regulations and far less monitoring to achieve higher levels of environmental quality. Without regulation, large-scale corporate operations, by their very nature, will impose costs on their neighbors - air pollution, water pollution, and others -- that are not part of the historic costs of producing livestock. It will cost money for these livestock factories to deal with "externalities" such as air and water pollution. No "bottom-line" driven corporation will incur those costs unless they are forced to do so by government regulations - federal, state, or local.

Family farmers are people with human feelings and values, and most feel some sense of responsibility to their communities and the environment. Admittedly, there are some irresponsible and uncaring family farmers. But, family farmers at least have personal incentives to be stewards of the environment and good neighbors, regardless of how they may choose to behave. Public corporations have no such incentives. They are not people. Corporations have no heart or soul. Stockholders often are so detached from their investments they don't know or care what stocks they own - just as long as they make money. Local managers and workers may be good people who really care about the community, but when it comes to keeping their job, they must put profits and growth ahead of community. Professed corporate support of local communities, by necessity, can be nothing more than another strategy for profit and growth. Thus, government regulation and continual conflict are an inherent fact of corporate life.

Some people argue that contract producers are no different from any other family farmers. But, contract farmers are not making the decisions that affect the environment any more than they are making the decisions that affect the economics of their operations. The folks back at corporate headquarters decide what type of manure handling facilities they are going to use, or at least set production standards which severely limit the logical options. Corporate contractors typically send their contract farmers into the political arena to defend the corporation from environmental regulation. But, regulation of contract producers is just as necessary and inevitable as regulation of corporations.

Some Real Economics

If there is a penny of profit to be made by turning farm feed lots into meat factories, the agribusiness corporations will do it. They will do it even if the benefits to consumers are negligible and the damage to rural communities is great. If there are a handful of jobs and a few dollars in tax revenue to be gained, some desperate rural community will go for them -- even if far more farmers elsewhere are forced out of business and tax revenues eventually fall short of other costs to the community. If the large corporate operations have to clean up their environmental messes, you can bet they will force similar restrictions upon smaller, diversified operations - not out of concern for the environment, but as a means of upping their own competitive advantage. The only thing that really matters to them is short-run, economic self-interests. A publicly-held corporation is incapable of being concerned with anything else.

But, corporate profits should not be allowed to take precedent over the lives of people. The future of rural communities should not be sacrificed to satisfy corporate greed. The natural environment should not be sold to the highest bidders - who invariably are its biggest exploiter. True economics does not demand that profits take priority over the earth and its people.

Adam Smith, the father of conventional economic thinking, said that pursuit of individual self-interests was transformed into serving the public good as if by "an invisible hand." But, he didn't say that pursuit of profits by

large, corporate operations would result in the greatest benefit to society as a whole. Most economic enterprises in Smith's time, over 200 years ago, were small, family operations. For such operations, land, labor, capital, and management often resided in essentially the same entity, and farming was still the dominant occupation. Few enterprises were large enough to have any impact on the marketplace as a whole. Market transactions were direct between buyer and seller -- there were few opportunities for deceptive sales practices. Trade was mostly in basic commodities - every seller's wheat, bread, or shoes were pretty much the same offered for sale by other sellers. Under these conditions, profits were quickly competed away in highly competitive local markets.

There were few corporations in Smith's time, but he wrote about the dangers of monopolies and excess profits, -- "the price of a monopolist is upon every occasion the highest than can be got (p. 28)." He considered "joint stock companies," corporations, to be inherently irresponsible entities, and could think of only a handful of endeavors where publicly owned corporations could be justified (p. 341). Even those would require close public scrutiny and government control, he warned.

Human populations back then were small enough and technologies were sufficiently benign that people could have little permanent impact on their natural environment - at least not on a global scale. Strong cultural, moral, and social values dictated the norms and standards of "acceptable" individual behavior. Smith could not conceive of a society in which the welfare of the poor and hungry would not matter, or where people in general would behave in unethical or immoral ways. "No society can surely be flourishing and happy, on which the far greater part of the members are poor and miserable" (p 36).

In the environment within which conventional economics was born, in Smith's time, pursuit of self-interest might have served the interests of society reasonably well. But, the world has changed over the past 200 years. None of the important assumptions of truly competitive markets -- the prerequisite for efficient resource allocation by free markets - are valid in today's economy.

Today, giant corporations dominate almost every sector of local and global economies. Through mergers, joint ventures, and strategic alliances, corporations have formed "virtual" monopolies - irresponsible entities that maximize profits "upon every occasion." Corporate profits today are far larger than any concept of "normal" profit envisioned in classical economics. The basic economic resources of land, labor, capital, and management now reside in separate entities, sometimes divided even among nations. Labor and management are in continual conflict, and most corporate shareholders - owners of mutual funds and pension funds -- are hardly conscious of how much of what companies they own. Land has become just another marketable commodity to be exploited and used up.

Producers and consumers have become disconnected, geographically and conceptually, as a consequence of industrialization. Consumers no longer have any personal knowledge of where their products come from or of who is involved in their production. They must rely on a complex set of standards, rules, and regulations for product information, and today's advertising consists of "disinformation" by design. Superficial product differentiation abounds -- through processing, packaging, advertising, and marketing gimmicks -- making price competition impotent if not impossible.

Human activities are no longer ecologically benign -- if they ever really were. The pressures of growing populations and rising per capita consumption are now depleting resources of the land far faster than they can be regenerated by nature. Wastes and contaminants from human activities are being generated at rates far in excess of the capacity of the natural environment to absorb and detoxify them. Fossil fuels, the engine of twentieth-century economic development, are being depleted at rates infinitely faster than they can ever be replenished. Human population pressures are destroying other biological species, upon which the survival of humanity may be ultimately dependent. The human species is now capable of destroying almost everything that makes up the biosphere we call Earth, including humanity itself.

The society of Smith's day was weak on economics - hunger, disease and early death were common -- but it had a strong cultural and ethical foundation. However, that social and ethical foundation has been seriously eroded over the past 200 years -- as glorification of greed has replaced enlightened self-interest. Civil litigation and criminal prosecution seem to be the only constraints to the unethical and immorality pursuit of profit and growth. Concerns of

the affluent for today's poor seem to be limited to concerns that welfare benefits may be too high or that they will be mugged or robbed if the poor become too desperate. Smith's defense of the pursuit of self-interest must be reconsidered within the context of today's society - a society that is now strong on economics but weak on community and morality.

Proponents of factory livestock operations argue that the industrialization of agriculture is nothing more than a continuation that has been underway in agriculture and elsewhere for the past couple of centuries. And so, they ask, "why is everyone getting so up tight about it now?" They are right, the trend toward industrialization has been underway for a couple of hundred years. The earlier phases on industrialization were likely good - at least for society as a whole. It lifted much of humanity out of a life of drudgery and despair. But over time, as the "invisible hand" became less and less capable of transforming greed into good, the benefits of industrialization fell and its costs began to rise. Over the past 30-40 years it has become increasingly obvious to anyone willing to look that industrialization has turned from creating net benefits to society in general to creating profits for the few who have money to invest.

The current industrialization of agriculture is just the latest phase in this long painful process. But, there is little doubt in the minds of many that corporations, in general, now do far more damage to the natural environment and communities of people everywhere than any good they might do in additional material goods, employment, and income. People are "up tight" because they don't want the same things to happen to agriculture that has already happened in much of the rest of society. They have had enough.

It's Just Common Sense

Society simply cannot justify destroying the lives and livelihood of thousands of struggling farmers to create huge profits for a few corporations by saving mostly affluent consumers a few pennies on a steak or pork chop -- particularly not when costs could be reduced as much or more by simply helping more farmers manage as well as many already do. It's not socially responsible. It may make short-run economic sense, but it doesn't make common sense.

As consumers, we don't want our meat to come from genetically identical hogs and cattle, fed the same rations, to identical weights, and then cut, processed, and packaged in dozens of different ways to make us think we are getting something different. We are different people and we have different tastes and preferences. Forcing everyone to buy the same corporate hog or steer just to satisfy corporate greed doesn't make sense - regardless of whether it is possible and profitable.

Free markets might very well be capable of meeting the needs of society through the pursuit of individual self-interests. But we no longer have free markets - at least not free in any sense needed to ensure the common good. What's happening in the livestock industry today is not a response to free markets, but instead is a brazen attempt to serve private interests at the expense of society. It's not socially responsible. It may make short-run economic sense, but it doesn't make common sense.

The people of rural America are being sacrificed in the name of economic progress and corporate growth. Farming is being made obsolete by industrialization, not because farming is inefficient in meeting the needs of society, but because it is inconsistent with maximum profits and growth for corporate shareholders. Livestock factories require assembly line workers, not thinking, caring, independent decision-makers. As rural communities promote growth by trading farmers for corporate hired hands, they are not only destroying the lives of those who have helped build their communities, they are trading away the human resources upon which the future development of their communities must depend. This is not socially responsible. It may make short-run economic sense, but it doesn't make common sense.

Society simply cannot justify destroying the natural environment of rural areas just to create huge profits for a few corporations, even if there are fewer people in rural areas to complain, and rural environments are generally less polluted than elsewhere -- particularly not when society has so little to gain and so much to lose. Industrialization concentrates too much "stuff" in one place. Nature is inherently diverse and naturally dilutes. Thus, industrialization

and nature are in inherent conflict. The natural result of this conflict is polluted air, polluted water, degraded resource productivity, and unhealthy people. All of these problems are inherent within the nature of industrial systems of production. Industrial systems are not ecologically sound. They may make short-run economic sense, but they don't make common sense.

It doesn't make sense to apply the same environmental rules to small, diversified family farms as to large, specialized livestock factories - the environmental risks are in no way comparable. It doesn't make sense to spend millions of tax payer dollars trying to help corporate agriculture find ways to cope with the environmental problems of factory livestock operations, when there would be no such problems without livestock factories. It doesn't make sense to mine nutrients from the soil in grain growing regions in order to create mountains of environmental wastes in places where crops can't grow. It doesn't make sense to force people out of business who have a obvious vested interest in protecting the environment, only to replace them with corporations that are fundamentally incapable of environmental consciousness. None of these things are ecologically sound. They may make short run economic sense, but they don't make common sense.

The economy is a creation of people designed to serve the people - not the other way around. Any economic system that fails to support society, eventually will be rejected by society - it is not sustainable. Systems that are not socially responsible are not economically viable over time. Livestock factories are not socially responsible systems of production, and thus, are not economically viable - no matter how profitable they may appear in the short run. This is the real economics of livestock factories.

Opposing corporate interests, in agriculture and in the general economy, is necessary but not sufficient to sustain the quality of human life in rural communities and in society in general. Being against something is not enough, we must also be for something. We must develop a positive vision for the post-industrial society toward which we want to move. That vision is emerging under the conceptual umbrella of sustainability -- sustainable agriculture, sustainable communities, and sustainable development.

Sustainability is not just about the future, it is also about "now." It's about meeting our needs in the current generation while leaving equal or better opportunities for those of generations to follow. It's about taking care of ourselves, sharing with our neighbors, and being good stewards of nature so there will be enough left for those of tomorrow. Sustainable farms, communities, and societies must be economically viable, but they must also be ecologically sound and socially responsible. Economics provides the optimum means of using up or exploiting resources - both human and natural. But economics does not even address the necessity for conserving or regenerating resources for the future. Thus, decisions guided by short-run, economics alone will sustain neither people nor nature. In the future we must make purposeful, conscious decisions to take care of each other and take care of the natural environment while taking care of ourselves. In fact this is the only way that we can truly take care of ourselves. We cannot rely on some "invisible hand" to somehow transform our greed into fulfillment of our social and ethical responsibilities.

The "real" economics of livestock factories is not the economics of short-run self-interest, but instead is the long run economics of sustainability. Any system of production that is not socially responsible and ecologically sound cannot be sustained over time, and thus, is not economically viable. Large-scale corporate livestock operations are not socially responsible, they are not ecologically sound, and thus, they are not economically viable. This is the "real" economics of livestock factories - it's just common sense.

Smith, Adam. 1776. *An Inquiry into the Nature and Causes of the Wealth of Nations*, Fifth Edition, Edinburg: Adam and Charles Black, London, MCDLXXVI