Are small farms real farms? I have addressed this question on various occasions over the years, and of course, in my book, *Small Farms Are Real Farms*. I keep returning to this theme because I become more convinced over time that only small farms are real farms. Only small farms have the characteristics that have been associated with farming in the past and will be associated with farming in the future. I believe the large farm businesses of today eventually will be seen as a short-lived aberration in farming history because they were not real farms. Farms of the future will be smaller because large farms are not sustainable. Many people in the organic and sustainable agriculture movements claim that sustainability is not a matter of size; that any size farm can be managed either sustainably or unsustainably. I agree many small farms are not managed sustainably. However, I believe the things farmers would need to do to make today’s large farms sustainable would end up making them far smaller.

First, what is a *small* farm? How large is large and how small is small? A *small* beef cattle ranch obviously requires more acres than a *large* poultry operation and a *large* vegetable farm needs fewer acres than a *small* wheat farm. The USDA defines farm size in terms of value of production. They call any farm with less than $250,000 in annual sales a small farm; others draw the line at $50,000 a year. I think large and small exists mainly in the mind of the farmer rather than actual size of the farm. The farmer who needs more land and more capital to be successful is a large farmer, no matter how small his or her farm. The farmer who finds ways to make a better living on less land with less capital is a small farmer, no matter how large his or her farm. That said, I believe there is some absolute size beyond which a cattle ranch, poultry operation, vegetable farm, or wheat farm simply becomes too large to be managed sustainably – although the critical size obviously will be different for different types of farms.

Second, what is a *real* farm? Historically, a farmer has always been defined as one who cultivates land, cares for livestock, or otherwise operates a farm. The English word *farmer* has varied origins: from Middle English, *fermer*, *fermour* (“steward,”), from Old French *fermier* (“husbandman”), and from Medieval Latin *firmarius* (“one who rents land”). The English word *farm* comes from Middle English word, *ferme, farmhouse* (“rent, revenue, produce, stewardship, meal, feast”), from Old English *feorm, fearm, farm* (“meaning provisions, food, supplies, possessions, stores, feast, entertainment, haven”), from Proto-Germanic *fermō* (“means of living, subsistence”), and from Proto-Indo-European *perkʷ* (“life, strength, force”). It is related also to Old English words such as *feormian* (“to provision, sustain”), and *feorh* (“life, spirit”), and Icelandic word *fjör* (“life, vitality, vigour, animation”).

These root meanings of the words farmer and farm suggest that economics or business has always been an important aspect of farming. Root meanings such as “rent, revenue, subsistence, and means of living” suggest farming has always been a means for farmers to make a living or earn money. Farming has also been about producing food for others in the communities and societies in which farms have operated. Root meanings such as “provision, food supplies, and purveyor” suggest that farming has always been seen as part of the larger food economy.
However, farming has always been more than an economic enterprise. Root meanings such as “spirit, entertainment, feast, and haven” suggest that farms meet the social and spiritual needs of farmers and communities. Farming provides sustenance for the non-economic needs of farmers, farm families, communities, and societies – in addition to physical sustenance. Equally important, the roots of farms and farming strongly suggest an ethical or commitment to the long-term well-being of communities, societies, and humanity. Root meanings such as “stewardship, strength, firm, solid, security, and sustain” reflect a historical commitment of farmers to a permanent agriculture – to ensure the sustainability of societies and the future of humanity.

Notice that the root words for farmer and farm all tend to be positive or beneficial for those affected by farming. It should be no surprise then that farmers historically have held positions of high esteem in the U.S. and in much of the rest of the world. Thomas Jefferson, for example, believed strongly that the “yeoman farmer” best exemplified the kind of “independence and virtue” that should be respected and supported by government. Adam Smith, an icon of capitalism and author of the classic, *The Wealth of Nations*, observed that farmers ranked among the highest social classes in China and India and suggested it would be the same everywhere if the “corporate spirit” did not prevent it.

Smith never trusted businessmen in general and corporate managers in particular and could conceive of few situations that would justify allowing corporations. Smith's reference to China was to the philosophy of Confucius which ranked farmers second only to academics or scholars, followed by workers, and lastly, businessmen. Jefferson, likewise, did not believe financiers, bankers, or industrialists could be trusted to be responsible citizens and therefore should not be encouraged by government. All of these respected historical figures placed farmers at or near the top of society and those involved with business and economics at the bottom.

Using the growingly popular terminology of today, the farmers extolled by Jefferson, Smith, and Confucius were multifunctional farmers. Farms have always performed multiple functions and provided multiple economic, social, and ecological benefits for farm families, communities, societies, and humanity. As a recent international report of the global food system pointed out agriculture is inherently multifunctional: “It provides food, feed, fiber, fuel and other goods. It also has a major influence on other essential ecosystem services such as water supply and carbon sequestration or release. Agriculture plays an important social role, providing employment and a way of life. Both agriculture and its products are a medium of cultural transmission and cultural practices worldwide. Agriculturally based communities provide a foundation for local economies.”[4] However, as we have clearly seen, the multiple economic, social, and ecological impacts of agriculture may either be beneficial or detrimental.

The farmers valorized by past cultures obviously were intentionally multifunctional farmers. Their farms obviously produced multiple benefits for the natural ecosystems, communities, and societies in which they functioned, thus justifying their high esteem. Had the benefits been natural consequences of farming, there would have been no reason to credit farmers for the inherent functioning of their farms. The businesses and corporations whose managers ranked at the lowest levels of esteem by past cultures were also multifunctional. However, their detrimental social and ecological impacts apparently weighed heavily against their
economic benefits. Again, there would have been no justification for condemning the owner or manager if their negative impacts were an inherent aspect of business rather than a consequence of the intent, or more likely neglect, of business managers.

In summary, I contend that only those farms that are managed intentionally to provide multiple economic, social, and ecological benefits are worthy of the title of “real farm.” Farms historically have been defined by their multifunctionality and the multiple impacts associated with farming have been beneficial. This isn't to say that farmers have never made mistakes, including some bad mistakes, but the intentions of farmers were perceived to be good. Thus, farms deserving of respect and esteem must be intentionally managed for multiple benefits—economic, social, and ecological. Only intentionally multifunctional farms are “real farms.”

Furthermore, the farms that were held in high esteem in the past were small farms. The owners of large estates—the nobility—were not held in high esteem by Confucius or Smith; instead, they valorized the small-holders who farmed the land. The plantation owners of early America were not called the foundation of democracy by Jefferson, instead, he valorized the yeoman farmers on small farms. These distinctions in social standing reflected the stark differences between the net contribution of large farms and small farms to the greater good of society and humanity. Those farmers held in high esteem were intentional, multifunctional farmers who managed small farms; those in large farms were ranked with the industrialists and businessmen.

Many modern “farm experts” think of farms such as those revered by Smith, Jefferson, and Confucius as farms of the past, not farms of the future. They tend to look at trends of the past and project past trends indefinitely in the future. If this were true, there would be little hope for multifunctional small farms, meaning “real farms,” in the future. However, trends never continue indefinitely. At some point, all trends reverse course and move in the opposite direction, in farming as elsewhere. Everything on earth tends to operate on cycles, including farming.

A few years back, a couple of scientists proposed a list of the top twenty "great ideas in science" in Science magazine, one of the most respected scientific journals in the world. They invited scientists from around the world to comment on proposed list. Among the top twenty were such ideas as the laws of gravity, motion, and thermodynamics. The top twenty also included the idea: "Everything on the earth operates in cycles,” including everything physical, biological, social, economic, – everything. Some scientists responding to the article suggested that things “tend” to cycle, but no one suggested removing “universal cycles” from the top-twenty list.

In fact, every couple of hundred years throughout human history, societies have gone through “great transformations” that have led to fundamental changes and even reversals of trends. I believe we are in the midst of a transformation that will be at least as important as those of the Industrial Revolution of the late 1700s, perhaps as great as the beginning of science in the late 1600s, and maybe even the birth of agriculture and farming. Today's great transformation is being driven by the question of sustainability. How can we meet the needs of the present without diminishing opportunities for the future? I believe this question will be the defining question of the 21st century – for agriculture, society, and for the whole of humanity.
When we ask these questions of sustainability earnestly and honestly, we come to the inevitable conclusion: We are not meeting the basic needs of many if not most people today, and we most certainly aren't leaving equal or better opportunities for those of future generations. Nowhere is the lack of sustainability clearer – yet less understood and appreciated – than in the food and farming system in the United States.

We are told our food system is the envy of the world because Americans spend a smaller portion of their income for food than does any other nation. We have an abundance and variety of food products quick, convenient, and cheap foods from every corner of the earth. Why would we want to change the American food system? First, the current abundance of “cheap” food is a consequence of specialization, standardization, and consolidation of control: meaning the industrialization of American agriculture. Specialization allows workers to work more efficiently. Standardization allows routinization, and mechanization of the specialized functions. Specialization and standardization allow consolidation of control into large-scaled, eventually corporately-controlled, business enterprises. This is the process by which farms have achieved “economies of scale”—and small farms have been transformed into large farms.

The large farms credited with today's abundance of cheap food are not “real farms,” instead they are industrial “farm businesses.” Industrial “farmers” are motivated primarily if not solely by the economic bottom-line – by profits. They are intentionally mono-functional in that they are managed to maximize economic performance rather than for the multiple economic, social, and ecological benefits traditionally associated with “real farming.” Farm business managers rationalize their decisions by relying on the now-discredited economic belief that their mono-functional pursuit of economic self-interests will somehow be transformed into multifunctional benefits for society as a whole. Unfortunately, they are supported by agricultural economists who steadfastly refuse to address the multiple dimensions of agricultural sustainability.

The fundamental problem with industrial agriculture is that their mono-functional focus on the economic bottom-line invariably has unintended detrimental ecological, social, and economic consequences. For example, mono-functional, industrial agriculture is inherently reliant on non-renewable fossil energy, chemically-dependent monoculture cropping systems, and large-scale confinement animal feeding operations. We see the detrimental ecological consequences of these production systems in eroded and degraded soils, polluted streams and groundwater, depleted streams and aquifers, and the growing threat of global climate change. Mono-functional farms are degrading the natural resources upon which their productivity ultimately depends, and thus, are not ecologically sustainable.

We see the social and economic consequences of mono-functional industrial agriculture in the demise of independent family farms and the social and economic decay of rural communities – as the farms grow larger in size, fewer in numbers, and increasingly corporate-controlled. It takes people, not just production to support rural economies and to provide a desirable quality of life in rural communities. It takes people to shop on Main Street, to support local schools and hospitals, and to serve on city councils and volunteer fire departments. The workers on factory farms, who may be good people, have none of the responsibilities or abilities associated with
“real farmers.” Mono-functional farms are degrading the human and social resources upon which their productivity also depends, and thus are not socially sustainable.

Ultimately everything of use to us, including everything of economic value, must come from the resources of the earth – soil, mineral, air, water, energy; there is no place else. Beyond self-sufficiency, we must depend on others – on our relationships within society – to make the things of nature useful to us. The economy simply facilitates our relationships with nature and within society. The economy makes it possible to meet our needs impersonally, by earning, buying, and selling. Our mono-functional industrial agriculture is degrading the usefulness of nature and society, and thus is not even economically sustainable.

We are told we must accept the ecological and social risks of a mono-functional food system to provide domestic and global food security – to “feed the world.” However, our industrial agriculture has failed to ensure that all have access to adequate quantities of safe, wholesome food to support healthy, active lifestyles. A larger percentage of people in the U.S. are “food insecure” today than during the 1960s, with more than 20% of U.S. children living in food insecure homes.[2] In addition, the only foods affordable to many lower-income families are high in calories and lacking in essential nutrients, leading to an epidemic of obesity and other diet-related health problems. Internationally, the “Green Revolution,” which also relies on industrial farming methods, has similarly failed to bring food security to developing countries of the world. Millions of once self-sufficient, subsistence farmers remain unemployed in urban slums. Mono-functional farms have failed in their most fundamental purpose: food security.

The unsustainable mono-functional farms of today are either large farms or must become large farms in order to survive economically. The mono-functional struggle for economic advantage through economic efficiency is a never-ending battle. Once the economies of scale in production have been exhausted, the quest for economic power in financial market and commodity markets become imperative – thus the inevitable transition to corporate control. Large farms aren't necessarily mono-functional because they are large, they are large because they are managed mono-functionally. And mono-functional farms are not sustainable.

Likewise, small farms are not multifunctional because they are small, they are small because they are intentionally multifunctional. They are managed to provide ecological, social and economic benefits. Consequently, sustainable small farms are diverse, individualistic, and independent rather than specialized, standardizes, and corporately controlled. They integrate a diversity of farm enterprises to mimic the mutually beneficial relationships among the diverse elements of healthy living ecosystems. Wastes from some enterprises become productive inputs for others, and the products from some enterprises become raw materials for other value-adding farm enterprises. The wastes not utilized by farm enterprises are of magnitudes and concentrations easily assimilated in sustaining the biological health of natural ecosystems. Real farmers respect both the bounty and bounds of nature.

Real farmers also make their own decisions rather than relying on so-called experts or entering into comprehensive corporate production contracts. They rely on experience, knowledge, and insights to manage their diverse, individualistic, dynamic farming operations. Multifunctional farms can be as productive as mono-functional farms in terms of production per-
acre or per-head, but real farmers can't manage as many acres of crops or as many head of livestock as farm business managers. Thus, multifunctional farms require more management per unit of production, and often more labor. Thus multifunctional real farms provide more employment opportunities in rural communities than do mono-functional industrial farms. So what's wrong with having more farmers and more viable rural communities? Multifunctional, small farms are real farms – and are our best hope for a sustainable future.

The signs of a reversal of trends and the transformation of American agriculture are readily apparent – for those who are willing to even consider the possibility. Many farmers in America and around the world are already taking farming in a different direction. Those who believe that farms must grow still larger conveniently forget the southern U.S. was once characterized by plantations that were dismantled and divided into small farms after the Civil War. The old Soviet Union once was characterized by large collective farms, which were divided into small-holdings after the collapse. The “experts” fail to appreciate the importance of these new trends of today because they see agriculture as something separate from the larger economy and society. As in latter days of the South and the Soviet Union, we are in the midst of a great transformation.

The real farmers of the future may label themselves organic, biodynamic, ecological, natural, holistic, or choose no label at all; but they are all pursuing the same basic purpose. They are producing food that has ecological, social, and economic integrity. They are intentional multifunctional farmers. They are creating systems of farming capable of maintaining their productivity and usefulness to society indefinitely – a permanent, sustainable agriculture. They probably account for something between seven and ten percent of total U.S. food production, but their numbers are growing. At least eight “sustainable agriculture” conferences in the U.S. and Canada draw 1,000 to 3,000 people each year. Conferences drawing 500 to 700 people are becoming almost commonplace and virtually every state in the U.S. has a grass-roots organic or sustainable agriculture organization.

This great transformation reflects of growing concerns about the American food system and ultimately must permeate the system as a whole. Signs of transformation in the food system are most clear in the organic food movement, although “organic certification” does not ensure sustainability. The organic movement began in the U.S. in the 1960s, but didn't gain widespread support in the U.S. until the late1980s. Organic food sales then grew rapidly during the 1990s and early 2000s, averaging 20%-plus per year and doubling every three to four years, and has stabilized at around 10% per year.[8] 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.

The local food movement then emerged in the early 2000s, in response to public concerns about the sustainability of modern organic production. Local foods have since replaced organic as the most dynamic sector of the food market, although still only about half as large as organics in sales. The popularity of local foods is most visible in the growing numbers 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.[9] Estimates by Local Harvest[10] indicate there were 2,700 CSAs in the U.S. in 2009, compared with less than 100 in 1990.[11]
I personally think the sustainable food system of the future is most likely to evolve from the alliances, collaboratives, cooperatives, and other types of food networks where farmers and their customers join together to bypass the industrial food system entirely. Examples include food buying clubs, local food networks, food box schemes, regional food hubs, and a variety of farmer-owned cooperatives. *Grown Locally*,[13] *Idaho's Bounty*,[15] *Viroqua Food Coop*,[14] and the *Oklahoma Food Cooperative*,[15] are examples. These multi-farm collaborations, or “food hubs” as the USDA calls them, could well be the model for new community-based national and global food systems.[16]

To create a sustainable food system, farmers and consumers must find ways to “scale-up” their food networks to gain economic efficiency, without compromising their ecological, social, and economic integrity.[17] To maintain their integrity, and thus their sustainability, the farms and the food networks must both remain small enough for farmers and their customers to retain a sense of personal connectedness and a personal commitment to caring for the land and each other as they care for themselves. The farms must remain real farms, and both farms and local food systems must remain intentionally multifunctional.

Wendell Berry writes elegantly and insightfully about the culture essential for real farming. He writes that if the land is to be “used well,” farmers who use the land must “know it well, must be motivated to use it well, must know how to use it well, and must be able to afford to use it well.”[18] He also writes that to farm in harmony with the nature, farmers must farm “farms they know and love, farms small enough to know and love, using methods they know and love, in the company of neighbors they know and love.” I would add: producing food for people they know and love. Farmers can only truly know and love so much land and so many people, meaning both the real farms and community food systems of the future must be appropriately small.

**End Notes**


