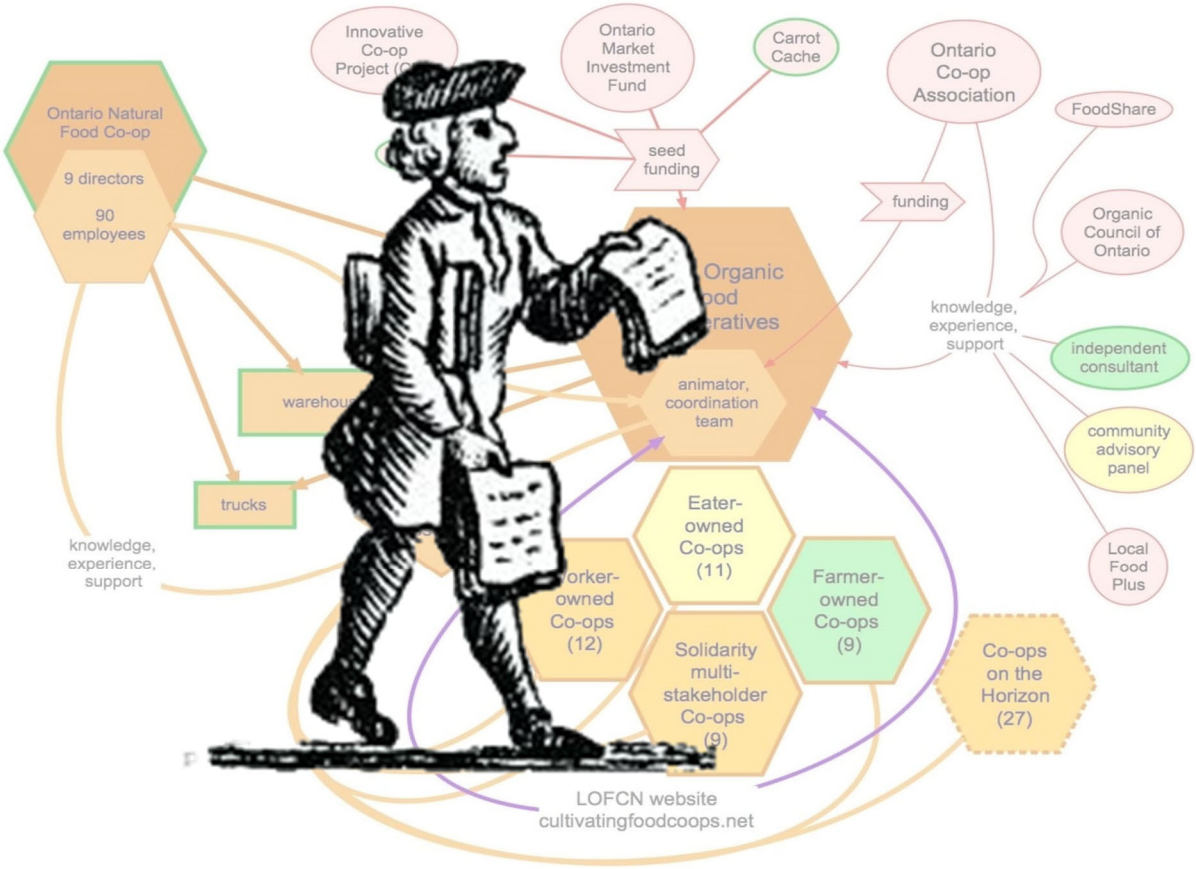
The Economic Pamphleteer Collection



Collected Columns by John Ikerd
on the Economics of
American Food Systems

JAFSCD
www.FoodSystemsJournal.org
ISSN 2152-0801 (online only)

Published by the Thomas A. Lyson Center for Civic Agriculture and Food Systems with the support of:

Johns Hopkins Center for a Livable Future
KPU Kwantlen Polytechnic University
The University of Vermont
NC State Extension
CEFS Center for Environmental Farming Systems
NCSU | NCA&TSU | NCDA&CS

Journal of Agriculture, Food Systems, and Community Development

Published by the Thomas A. Lyson Center for Civic Agriculture and Food Systems, a project of the Center for Transformative Action, and with the support of our founding institutional sponsors:

We appreciate the editing of this collection's front matter by Anna Ravenelle, Lyson Center work/study student.

The *Journal of Agriculture, Food Systems, and Community Development,* ISSN 2152-0801 (online only), is published by the Thomas A. Lyson Center for Civic Agriculture and Food Systems, a project of the Center for Transformative Action (an affiliate of Cornell University). Journal office: 295 Hook Place, Ithaca, NY 14850 USA.

The Economic Pamphleteer Collection

Collected Columns by John Ikerd on the Economics of American Food Systems

Contents

Introduction

DUNCAN HILCHEY

John Ikerd has the mind of an economist, the heart of an ecologist, and the soul of a Heartland farmer. For decades, he has questioned authority, spoken truth to power, and searched for common-sense solutions to the challenges of modern food systems. His most recent proposition for eliminating hunger through a "community food utility" is an example of his genius for forward-thinking yet practical ideas, which you will find in spades in this collection.

John is professor emeritus of agricultural and applied economics at the University of Missouri–Columbia College of Agriculture, Food and Natural Resources. I hesitate to suggest he is retired since he has a very active writing and speaking calendar that keeps him on the road, sharing his vision for a just and sustainable food system around the world. You can visit his website, http://johnikerd.com, to see where he is speaking next (and to find out where to purchase his books). John always seems to be working on a manuscript, authoring six influential titles in the last 12 years, including:

Revolution of the Middle…and the Pursuit of Happiness, 2014
The Essentials of Economic Sustainability, 2012
Crisis and Opportunity: Sustainability in American Agriculture, 2008
Small Farms Are Real Farms: Sustaining People Through Agriculture, 2008
A Return to Common Sense, 2007
Sustainable Capitalism: A Matter of Common Sense, 2005

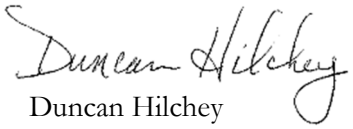
So it's pretty obvious why we wanted to recruit John as our first columnist for JAFSCD seven years ago, and also why we were so pleasantly surprised when he agreed to write a quarterly column!

In this compilation of John's *The Economic Pamphleteer* columns, we are proud to share the 22 pieces he has written between 2010 and early 2017. Often linking his topics to the theme of an issue or to current events, he covers all three general domains of the food system: production, distribution, and consumption. Along the way, he touches on a broad range of critical subjects, from intergenerational farm transfers and land use to viable supply chains and racial equity.

This collection is free for you to share as you wish. It is sure to stimulate discussion at both the theoretical and practical levels. I invite you to quote John liberally and recommend sharing bits and pieces with colleagues around the water cooler or at organizational meetings—or adding the entire collection to course packets.

I want to thank Doria Robinson for writing the foreword for this collection. Doria is executive director of Urban Tilth, a community-based group that hires and trains residents of Richmond, California, to increase local food production. Doria become a fan of John's work after meeting him at a conference in the San Francisco Bay area.

Finally, I ask you to take note of JAFSCD's publishing partners on the cover. Without their annual support, we would not have been able to bring *The Economic Pamphleteer* to light.



Duncan Hilchey
Editor in chief, *Journal of Agriculture, Food Systems, and Community Development*

Foreword

DORIA ROBINSON

Toward an Economics of Just and Sustainable Agriculture

The 2016 True Cost of American Food Conference I had been asked to speak at took place on an unexpectedly warm and sunny day for April in the Bay Area. I arrived at the Fort Mason Center and took in the epic view of the Golden Gate Bridge, sailboats crossing the expanse scattered among the cruise ships. I lingered on the edge of the pier, holding the thick ropes, feeling the heat on my skin—hoping that that small relief would outweigh my wariness and rekindle some sense of optimism for what this gathering could hold.

After nine years of working on the ground as an urban agriculture practitioner, I had lost faith in the benefit of conferences that professed to address things like the True Cost of Food. Inevitably these well-meaning gatherings, geared toward either larger-scale or boutique organic farmers, seemed to offer up a small set of solutions based on technological innovations—the newest water-saving techniques, rare heirloom seed varieties, vertical farming, hydroponics, and new marketing techniques. If they were "radical," I could expect a depressing and detailed description of the ways that our current system of industrial agriculture is devastating the planet and be offered a salve of declaration of the need to "transform the food system" with few details on how this might be done at scale in an inclusive, just, and environmentally and socially responsible way.

I remember the weight of this on my face as I tried to fix a respectable and presentable smile. I entered through the glass doors telling myself that maybe this time it would be different. I had cultivated a habit of working right up until the last minute before a speaking engagement so I could spend as much time as possible doing what I thought of as the "real work" and less time pretending conferences such as these could make a real difference in the lives and health of the people of my community. I also knew that I had only been asked to speak after the conference experienced a backlash and boycott when few local practitioners were included on panels and not one was included in the planning. I would quite

---

Doria is a third-generation resident of Richmond, California, and the executive director of Urban Tilth, a community-based organization rooted in Richmond and dedicated to cultivating a more sustainable, healthy, and just food system. Urban Tilth hires and trains residents to support the development of local sustainable agriculture and the capacity to locally produce 5% of the city's food supply.

Raised in a strong church community where her grandfather was the minister, Doria spent weekends and summers on the church's 350-acre ranch in Fairfield, California. It was on the this ranch that she was taught her first strong lessons on the power of cooperative economics by her grandfather, Elder Vernon V. Robinson. Doria has also worked on organic farms in western Massachusetts, where she attended Hampshire College; and at Veritable Vegetable, a women-owned organic produce distribution company; and Real Food Company and Mixed Nuts Food Co-op.

In 2014 she led the charge to develop Urban Tilth's first 3-acre urban farm in Richmond, relaunched the Farm to Table countywide CSA using hyperlocal produce, and seeded the Richmond Food Policy Council's effort to install salad bars in every Richmond school in order to increase access for all Richmond kids to healthy whole foods.

Doria currently lives in the neighborhood in which she grew up in Richmond with her wonderful 14-year-old twins.

literally be there as an afterthought, violating the boycott called for by many of my colleagues in the local urban agriculture community, and I would be one of the only black, female urban farmers speaking about production, scale and the "true cost of food" from an urban American perspective. I had only 10 minutes to get registered and find the room where my panel ("Does Size Matter?") was taking place, so I signed in, reconnected with a few of that same group of colleagues I always saw coming and going at these things, and made my way to the room.

I knew nothing about my fellow panelists outside of their names, what I gathered from quick Google searches the week before, and the titles of their talks: Mike Hamm (of the Center for Regional Food Systems at Michigan State University) on "Scale diversity and food hubs"; Jim Slama (of Family Farms) on "Feeding the 99% Good Food"; and John Ikerd on "The True Cost of Large-Scale Farming." I remember being hopeful about food hubs, interested in the proper role of increasing sales and distribution to create an economically viable and responsibly produced food system, and being naively dismissive of what I thought would be the doom and gloom full-cost accounting of large-scale farming offered by an agricultural economist from the heartland of our country who I had never heard of, John Ikerd.

Hearing John Ikerd outline his thoughts for the first time was life changing. Anchoring himself in data, he went beyond platitudes, delving into the details of redefining key aspects of agriculture, like clarifying the difference between large-scale and small-scale farming by their intensity of management and the subsequent impact of management practices on the land. In 20 minutes, he questioned our assumptions of "scale," made the concept pliable enough to transcend acreage, and rooted its *new* definition in management practices—in its qualities rather than quantities—and it was, quite honestly, revolutionary. A "small" farm could be 500 acres (200 hectares), depending on how it was managed. I sat in my seat, thinking to myself that this reorientation made it possible to begin to conceive of an inclusive food system truly capable of feeding the world sustainably.

I was in awe. John was an economist who was unafraid to understand, and then insist on defining, agriculture as more than just a profit-making enterprise. He approached agriculture as a complex set of interdependent systems—the exchanges inherent in production, distribution, and consumption, as well as social interactions, human and ecological health, soil, water, and air. Since that day, I have explored some of the depth and breadth of John's work, always finishing a column feeling inspired. His ideas on the potential for vertical cooperation and the destructive trap of the concept of *limitlessness* have become central to the development of my own work and the work of others in my community.

In this collection, John Ikerd offers us a set of ideas as if they were a set of finely wrought tools he has been refining over the course of his career and is now passing along to us. These tools help to articulate a practice of sustainability economics, where limits exist and are embraced, and quality prevails over quantity. Through a thorough exploration of the economics, he elucidates how we can begin to redefine and remake our food systems so that they nurture our bodies, our communities, and our planet.

As you explore these ideas in the following pages, I invite you to reflect on the meaning of "economy," from *oikos*, meaning "house" or "home," and *nemein,* meaning "to manage." As we began to pursue profits, we somehow lost our way and forgot that our ultimate goal has always been a sustainable system to care for—or to manage—our "home," from the fields to the grocery stores, farm workers to consumers, and seed to fork.

Preface

JOHN IKERD

How can we meet the needs of the present without diminishing opportunities for the future? That's the essential question of sustainability. I'm convinced sustainability will be the defining question of the 21st century. Nothing is more fundamental or critical to the future of humanity than is the sustainability of our systems of farming and food production. Nothing is more critical to the future sustainability of our agri-food system than the sustainability of our communities.

Our current food system is not meeting the most basic nutritional needs of many people in the world today. Even in the United States, more than 20% of our children live in food insecure homes. With the rampant depletion and degradation of nature and society by industrial agriculture, we certainly are not leaving equal or better food security opportunities for those of future generations. Our current agri-food system is not sustainable. Change, deep fundamental change, is no longer just an option; it is an absolute necessity. I have come to believe such change must begin within, including within us as individuals and within our personal relationships in our local communities. These have been some of the central themes of my column: *The Economic Pamphleteer*.

When I agreed to become a columnist for the Journal of Agriculture, Food Systems, and Community Development (JAFSCD), I agreed to focus on the philosophical and controversial issues that I thought were important and to leave the more academic issues to others. I'm convinced that the essential changes in agriculture, food systems, and communities must be revolutionary rather than evolutionary. I think it will take a "good food revolution," a revolution that starts in our local communities. So, my views may seem a bit radical. When asked for a title for my column, my thoughts turned to Thomas Paine, a prominent pamphleteer during the American Revolutionary War. Pamphlets historically were short, thoughtful opinion pieces that played a key role in every revolution in Western history.

I am an agricultural economist. I chose the title The Economic Pamphleteer for my column because I have concluded that the current dominant ways of economic thinking aren't working now and aren't going to work in the future. We need a revolution in economic thinking. In order to gain competence and credibility in the area of sustainability, I have had to become at least literate in several other disciplines, including ecology, sociology, anthropology, and philosophy. Economics is but one aspect of a larger, interrelated whole. This perspective has made me a better agricultural economist today than at any other time during my 30-year academic career, and I can say with virtual certainty that our current agri-food system isn't economically sustainable. Neither are our communities, our society, our economy, nor humanity—not without a revolutionary change in our ways of thinking.

Having spent the first half of academic my career as a conventional free-market, bottom-line agricultural economist, I know where most economists are "coming from." I used to work and live there. By remaining aware of consequences of economic decisions, as well as intentions, I eventually was forced to conclude the economics I had been taught and had been teaching wasn't working. It wasn't

good for farmers, wasn't good for rural communities, wasn't good for the land, and wasn't even good for consumers. I have spent the 30-plus years since—including 17 years since retiring—learning, teaching, and writing about the essential principles of sustainability with an emphasis on economics and agriculture.

I write "my truth"—the things I believe to be true. I write with conviction because I know why I believe what I believe. Other people's truths may be different from mine. That's okay with me. I don't believe that any of us should be as egotistical as to believe that only we know "the truth." At best, we are all just searching for it. All I ask is that others know why they believe what they believe; just because some so-called expert wrote something is not a very good reason to believe anything. We must find our own truth. My hope is that my column will encourage and inspire other revolutionary thinkers to write and speak "their truth." Hopefully, in our search for truth, we can bring about a revolution in thinking – beginning in agriculture, food systems, and community development—that ultimately will transform our economy and society.

Questions of sustainability permeate every aspect of our reality. So, I have addressed the various themes identified in JAFSCD calls for articles. I have selected other agriculture and food related topics for issues of the journal without specific themes. I have written about issues such as land-use planning and agricultural policies, research and education, cooperation and competition, workers' rights and cultural diversity, and the basic purpose and functions of sustainable farming. I have also written about general issues, such as the essential principles of sustainable agri-food systems, the unsustainability of economic growth, new "ethics" of food and sustainability, and perhaps most important, the right to "enough good food" as a basic human right.

The basic premise of my columns is that unrestrained economic extraction and exploitation of nature and society is the greatest threat to the sustainability of human life on earth. Everything of use or value to humanity, including everything of economic value, ultimately must come from the earth—air, water, soil, mineral, energy. There is no place else. Beyond self-sufficiency, we must rely on relationships with other people, on society, to meet needs we cannot meet for ourselves. To meet needs we can't meet though personal relationships, we must rely on "impersonal" markets: earning, buying, and selling, rather than gifting or bartering. The unrestrained pursuit of economic growth is destroying the integrity of nature and society, the sources of all future usefulness and value.

If we are unwilling to restrain our pursuit of economic self-interest, we ultimately will not only destroy our economy but will make the earth a hostile and perhaps uninhabitable place for humans. The prevailing wisdom seems to be that the problems of sustainability will require rational economic solutions; *even many advocates of sustainability seem reluctant to give priority to ethical or social values that cannot be monetized or measured in dollars and cents.* We give the priced priority over the priceless. However, a fundamental purpose of governance is to establish and enforce ethical and social bounds within which economies must function. Radical as it might seem, "rational" economic thinking is the problem, not the solution. To quote the seminal American pamphleteer, Thomas Paine, "Let them call me rebel and welcome, I feel no concern from it; but I should suffer the misery of devils, were I to make a whore of my soul…" (Paine, 1776).

Thomas Paine never wavered in his condemnation of the British Monarchy, even though his views were frequently unpopular—particularly among the Loyalists to the Crown. Once the American colonies were free from monarchical oppression, he went beyond this criticism to paint an equally radical vision of the positive possibilities for the future. Paine's dream of democracy was a dream worthy of revolution. Never losing hope for the ultimate success of the revolution, no matter how dark and futile the situation might have appeared, he believed liberty and justice would ultimately prevail over oppression and exploitation.

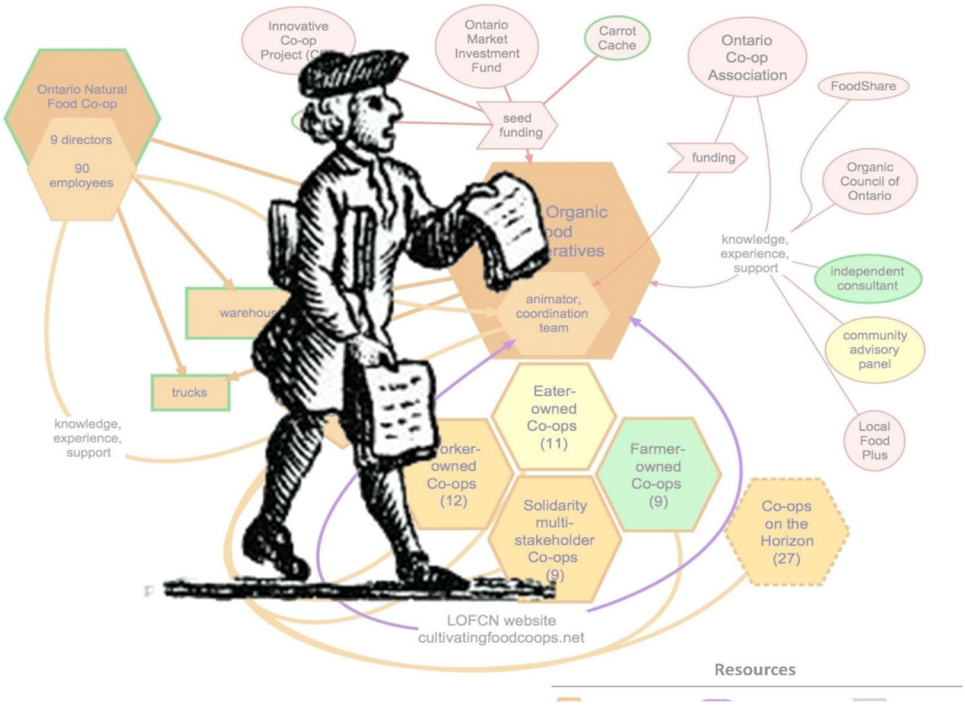
I have tried to pattern my pamphlets on those same principles. I have been relentless in my critique of industrial agriculture. However, I have also tried to provide insights into the positive possibilities for a sustainable agri-food system and a fundamentally better future for farmers, consumers, and society in general. I have written about how positive personal relationships in caring communities can evolve into the shared social and ethical values essential not only for ecological, social, and economic integrity but also for a more desirable quality of life.

More recently, I have begun to understand that ensuring enough good food for those of the future is contingent upon ensuring enough good food for everyone today. A commitment to food security, in the present, is a prerequisite for future agri-food sustainability. I believe a commitment to both present and future food security will emerge from personal relationships among thoughtful people in caring communities. The rights of life, liberty, and the pursuit of happiness are contingent on the right of all people to enough safe, nutritious, sustainably produced food. Caring communities are our best hope for agri-food sustainability and the future for humanity. 

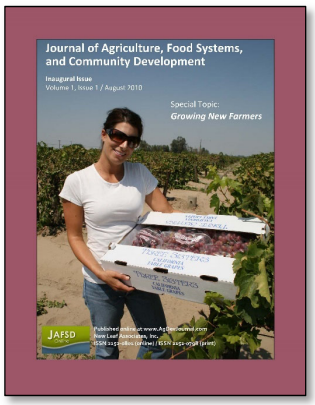
Reference

Paine, T. (1776). *The Crisis No. 1*. Retrieved January 2017 from the AMDOCS website: http://www.vlib.us/amdocs/texts/crisis1.html

The Economic Pamphleteer Collection



THE ECONOMIC PAMPHLETEER
Published August 12, 2010



Rethinking Government Policies for Growing Farmers

Original column citation: Ikerd, J. (2010). Rethinking government policies for growing farmers. *Journal of Agriculture, Food Systems, and Community Development, 1*(1), 5–7. http://dx.doi.org/10.5304/jafscd.2010.011.004

"We can't solve problems by using the same kind of thinking that created them." At no time have these oft-quoted words of Albert Einstein been more appropriate than in addressing the problems of today's farmers. Between 1940 and 1990, with the industrialization of agriculture, the number of farms in the U.S. dropped from more than six million to just over two million. This drop in the number of farms has since leveled off, but the ability of farms to support farm families has continued to decline. Over the past couple of decades, around 90 percent of farm family income has come from nonfarm sources.

In spite of all of the political rhetoric about supporting family farms, government farm programs have consistently subsidized the industrialization of agriculture. As a consequence, farm programs have contributed both directly and indirectly to the demise of family farms. Subsidized, standardized, routinized, and simplified farm management has effectively coerced or forced fewer farmers on larger farms to produce more food at ever lower economic costs. However, these same strategies are directly responsible for the lack of agricultural sustainability. We can't solve the ecological, social, or economic problems of agriculture today with the same kind of thinking that created them.

We need a new kind of farmer to tackle the challenges of farming today. Sustainable farmers must manage diverse crop and livestock systems in ways that restore soil fertility, manage pests, and sequester solar energy, rather than relying on synthetic fertilizers and pesticides and other fossil-energy–based inputs. Sustainable farmers must manage their farms in ways that reconnect them in positive relationships with their neighbors and their customers. Sustainable farming is inherently management intensive, meaning that it will take more farmers on smaller farms to feed the nation. The food may not be as cheap, but sustainably produced food will be worth paying the full environmental, social, and economic costs. And in order to grow more crops and livestock more sustainably, we also must grow more sustainable farmers.

As stated in the inaugural call for proposals for this journal, "Over the last two decades, a myriad of programs have been started to stem [the loss of farmers]." Some of these programs have met with modest success, such as the USDA Small Farms

program. Others have only accelerated the decline, such as those subsidizing beginning farmers in conventional commodity production. Government programs to grow more farmers must be based on thinking very different from thinking of the past.

Today's approach to farm policy probably made sense until around the middle of the last century. The manufacturing sector of the economy was growing rapidly and good-paying jobs were readily available for most of those who left agriculture. At that time, many of the negative ecological and social consequences of industrial agriculture were unknown. Neither of those conditions exists today. The good-paying manufacturing jobs have gone to other countries. Unemployment is hovering just under 10 percent, with little prospect for ever recovering the good-paying manufacturing jobs of the past. With growing recognition of the negative environmental, social, and public health impacts of industrial agriculture, farm policies of the past no longer make economic or political sense.

The only legitimate justification for government involvement specifically in agriculture is food security. Farm policies since the 1950s have focused on food security through economic efficiency and international trade. Farmers are subsidized to produce feed grains for export while we rely on food imports for security. Food security based on international markets is not real food security, as many countries discovered with the skyrocketing food prices of 2008. The new thinking would focus farm policy on long-run, domestic food security, through restoring the natural fertility of the land and growing farmers committed to stewardship of the land. As Wendell Berry has written, "If the land is to be used well, the people who use it must know it well, must be highly motivated to use it well, must know how to use it well, must have time to use it well, and must be able to afford to use it well."

How might this kind of thinking reshape farm policy? A quick search of the internet will show that federal, state, and local governments are routinely shelling out subsidies of $30,000 to $50,000 per private-sector job, in their effort to reduce unemployment. Many of these jobs are not new but rather are jobs relocated from one community to another. The subsidies include direct payments, tax abatements, infrastructure, worker training, and other publicly funded economic incentives. Official government estimates for the current stimulus program exceed $90,000 in government funds per job created. Why not subsidize the creation of new, permanent employment for farmers instead? Farm programs could be redirected to create new opportunities for farmers in both rural and urban communities who are committed to staying in those communities and caring for the land. Federal funds budgeted each year for current farm commodity programs could facilitate the creation of at least 400,000 new sustainable farms.

Official government estimates for the current stimulus program exceed $90,000 in government funds per job created. Why not subsidize the creation of new, permanent employment for farmers instead?

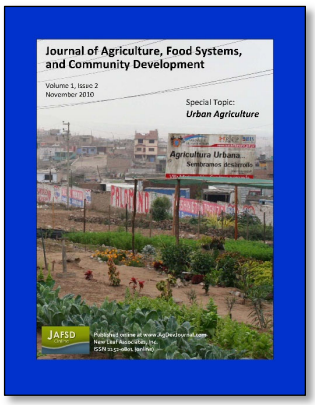
The details of such policies would need to be worked out through a deliberative process involving taxpayers, consumers, and farmers—excluding agribusinesses. Perhaps they would come up with a "New Farmstead Act," a program to establish new farms and farmers in both rural and urban communities. Beginning farmers could be given $50,000—a no-interest, nonrecourse government loan—for a down payment on a farm. The farmer would have five to 10 years, depending on the nature of the farming operation, to establish a sustainable, commercial farming operation with at least $100,000 in annual sales.

To ensure that farmers are able to "use the land well," the purchase price of the land could not exceed $500,000 — about 100 acres of good farmland in the Midwest, a few acres on the urban

fringe, or a vacant city lot. In addition, the principle farm operators would have to earn 75 percent of their total income from the farm in order to validate their personal commitment. The purchase would place an agricultural easement on the land, to protect against later sale for development. After a successful "proving up" period, 20 percent of the loan would be written off each year until the loan were erased. If farmers failed to prove up their farmsteads, their land would be sold to another farmer, or to the government, at no more than the original purchase price.

The intent here is not to propose a specific new program, but rather a new way of thinking about farm policy. Regardless of the details, a dramatic rethinking will be necessary if the U.S. is to grow enough new farmers to ensure the nation's food security. 

THE ECONOMIC PAMPHLETEER
Published November 24, 2010



Zoning Considerations for Urban and Peri-urban Agriculture

Original citation: Ikerd, J. (2010). Zoning considerations for urban and peri-urban agriculture. *Journal of Agriculture, Food Systems, and Community Development, 1*(2), 5–7. http://dx.doi.org/10.5304/jafscd.2010.012.001

Every year, about 1.2 million acres of U.S. farmland is converted to residential and other commercial uses, according to the American Farmland Trust.[1] This includes some of the most fertile farmland in the nation, as many of our major cities were originally established in fertile farming areas. With more than 900 million acres of farmland remaining, we are not likely to run out of land for farming in the near future. However, farmland conversion is clearly putting the long-run sustainability of U.S. food production at risk.

Our current industrial food system is critically dependent on cheap fossil energy for fertilizer, machine operation, irrigation, and food manufacturing, transportation, and retailing. Industrial agriculture is also a major contributor to growing environmental problems. Although estimates vary, food production in the U.S. may account for up to 20% of all fossil energy use and something more than 20% of all greenhouse gas emissions. In addition, agriculture is the number one nonpoint source of pollution of U. S. rivers and lakes.[2] With dwindling fossil energy supplies and rising environmental concerns, every acre of fertile farmland lost to development becomes more precious each year.

The local foods movement presents a prime opportunity to address the problem of farmland conversion. Producing more of our food in and near major population centers would obviously preserve fertile farmland for future food production. People also become more aware of their inherent connectedness to the land when they live on or near farms. Thus, commercial farming in urban and peri-urban areas should encourage the transition from industrial to sustainable systems of farming and food production. However, as farms and residences increasingly rub shoulders, farms in

[1] American Farmland Trust, http://www.farmland.org/programs

[2] U.S. Environmental Protection Agency, *Managing nonpoint source pollution from agriculture,* Pointer No. 6, EPA841-F-96-004F, http://water.epa.gov/polwaste/nps/outreach/point6.cfm

urban and peri-urban areas will need to be "people-friendly" farms.

Many of the current conflicts associated with farming in urbanizing areas arise from industrial farming practices, such as aerial pesticide application and confinement animal feeding operations.[3] Many residents in peri-urban areas logically refuse to be subjected to a daily dose of noxious odors or even an annual dose of toxic pesticides. In densely populated urban areas, the nuisance and health risks associated with industrial agriculture would be even less tolerable.

On the other hand, farms that use organic or other sustainable farming practices are good places to live on and live around. Anyone willing to adapt to life in the country would enjoy living next door to a sustainable farmer or even in a cluster development with residences strategically placed to accommodate the farming operation. Sustainable urban "farms"—on rooftops, in backyards, or on neighborhood farm-parks—would generate fewer odors, less noise, and fewer health risks than the garbage, traffic, and other daily perils of urban living. However, those who produce food in urban and peri-urban areas must accept restrictions in their choices of enterprises to accommodate the preferred lifestyles of nearby residents.

As farms and residences increasingly rub shoulders, farms in urban and peri-urban areas will need to be "people-friendly" farms.

Land is inherently a "public good" and must be used in ways that benefit the common good of society in general. This does not deny private property rights, which have always been limited rights of land use rather than absolute rights of land ownership. Zoning is a common means of limiting uses of private property. For example, people living in areas zones as "residential" cannot use their property for most commercial purposes. Even areas zoned "commercial" may be restricted as to what types of businesses may be operated, depending on their proximity to private residences, housing developments, schools, churches, or other noncommercial uses.

Zoning is a process by which the public, in essence, grants permission to landowners to use their land for certain limited purposes. Rezoning likewise requires public permission to change land uses. Rezoning may be done with or without the permission of the landowner. Private property rights are not absolute. They are granted by and may be revoked by the public through due processes of law.

Historically, agriculture has been exempt from many of the land use restrictions that apply to other types of commercial operations. Right-to-farm laws have exempted farmers from nuisance laws as long as they use "accepted and standard" farming practices, even in cases where such practices are detrimental to nearby property owners or the general public.[4] The exemptions typically include noise, odors, visual clutter, and dangerous structures. Every state has some form of a right-to-farm law.

Right-to-farm laws became common in the U.S. during a time when a large segment of the population lived on a farm, had grown up on a farm, or had some direct knowledge of farm life. Farming was an accepted way of life and could not be deemed a nuisance legally by those who didn't understand it. Perhaps most important, farming was very different from other commercial land uses. Farming at the time generally didn't involve heavy applications of toxic liquids and poisonous gasses, constant loud noises, or even significant exposure to noxious odors.

[3] American Farmland Trust, *Sustaining farms on the urban edge,* http://www.farmland.org/resources/sustaining-agriculture-in-urbanizing-counties

[4] Wikipedia On-Line Encyclopedia, http://en.wikipedia.org/wiki/Right-to-farm_laws

Today, right-to-farm laws are being challenged in the courts because today's large industrial farming operations are more like industry than agriculture. Fifty years of socioeconomic studies have verified that industrial agriculture not only diminishes property values and the quality of life of its neighbors, but also degrades the social and economic well-being of communities in which it becomes commonplace.[5] For example, the one thing on which advocates and opponents of large-scale confinement animal feeding operations seem to agree is the dissention these CAFOs invariably create in communities where they attempt locate.

If food production is to become commonplace in urban and urbanizing areas, agriculture must accept the same types of restrictions as are common for other land uses. Zoned uses for "urban agriculture," for example, might be limited to organic, bio-intensive, and other methods appropriate in densely populated areas. Most types of sustainable agriculture could be allowed on land zoned for peri-urban agriculture. Typical agriculture zoning and right-to-farm laws would be limited to traditional family farming operations. Industrial agriculture should be subject to the same zoning restriction and nuisance laws as any other industrial operation. If farmers resist reasonable land-use restrictions, food production will continue to be zoned out of urban and peri-urban areas.

If food production is to become commonplace in urban and urbanizing areas, agriculture must accept the same types of restrictions as are common for other land uses.

[5] Stofferahn, C. (2006, September). *Industrialized Farming and Its Relationship to Community Well-Being: An Update of a 2000 Report by Linda Lobao,* report prepared for the State of North Dakota, Office of the Attorney General, http://www.und.edu/org/ndrural/Lobao%20&%20Stofferahn.pdf

THE ECONOMIC PAMPHLETEER
Published June 24, 2011

Essential Principles of Sustainable Food Value Chains

Original citation: Ikerd, J. (2011). Essential principles of sustainable food value chains. *Journal of Agriculture, Food Systems, and Community Development, 1*(4), 15–17. http://dx.doi.org/10.5304/jafscd.2011.014.001

Values-based food chains include alliances of various types among farmers, processors, distributors, and other participants in food production and distribution. "Food value chains" are distinguished from conventional "food supply chains" in that relationships among participants are not solely, or even primarily, economic. Ironically, the formation of value chains is typically motivated by a quest for greater economic efficiency in the production and distribution of sustainably produced foods. However, economic efficiency cannot be allowed to take priority over the essential ecological, social, and economic principles of sustainability.

The essential ecological principles of sustainability include *holism, diversity,* and *interdependence*. Interdependent relationships among the diverse elements of healthy natural ecosystems make the ecological wholes something more than the sum of their parts. The essential social principles of sustainability include *trust, kindness,* and *courage*. Relationships defined by contracts, regulations, or economic interests are not sustainable. People in sustainable relationships must have the courage to trust and to care about others in a world where such things are often considered idealistic and naïve. The essential economic principles of sustainability include *value, efficiency,* and *sovereignty*. Sustainable economic enterprises must produce things of economic value, efficiently. They must make their own decisions and accept responsibility for their actions if they are to maintain economic viability.

The economy is a part of society and society is a part of nature. The three are also interdependent, in that each affects and is affected by the others. Thus, the same basic principles apply to all human relationships with nature and within society, which include economic relationships. Sustainable economic relationships must also reflect the principles of societies and natural ecosystems. Sustainable social relationships must also reflect the principles of economies and ecosystems. Sustainable relationships with nature must reflect the principles of societies and economies. Sustainable food value chains must have ecological, social, and economic integrity.

Rather than focusing on the economic bottom

line, food value chains must focus on the triple bottom line: the ecological, social, and economic bottom lines. All economic value ultimately is derived from nature and society. However, economic value is inherently individualistic. It makes no economic sense to invest in anything solely for the good of society as a whole or for the benefit of future generations. So, sustainable food value chains must renew and regenerate the productivity of natural and human resources, even when there is no economic incentive to do so.

Sustainable food value chains must have ecological, social, and economic integrity. Food value chains must focus on the triple bottom line: the ecological, social, and economic bottom lines.

Triple-bottom-line management has become a popular buzz word in the business world. However, a triple bottom line that gives priority to the economic bottom line will not have the capacities for *renewal* and *regeneration* necessary for economic sustainability. Furthermore, nature and society, as living systems, are always changing and evolving. Ever-changing government policies, market opportunities, production technologies, and public expectations are all consequences of such changes. Meeting the challenges of sustainability ultimately will require a radical rethinking and redesign of the entire food system. Sustainable food value chains must be *responsive* as well as *renewing* and *regenerating*.

The six Rs of sustainable systems are renewal, regeneration, responsiveness, resistance, resilience, and redundancy.

Obviously, sustainable food value chains must be able to survive the short run if they are to thrive in the long run. Food production is a risky business. For example, the food system is affected at all levels by biological organisms that are inherently self-making, dynamic, evolving, and thus never precisely predictable. Therefore sustainable food chains must be able to withstand unexpected shocks; they must be *resistant*. When their resistance breaks down, as after natural disasters and major economic setbacks, they must be able to bounce back; they must be *resilient*. In the most severe cases, they must have a fallback strategy or "plan B"; they must have built-in *redundancy*. Sustainable food value chains must be resistant, resilient, and redundant.

The essential characteristics of sustainable food value chains include renewal, regeneration, responsiveness, resistance, resilience, and redundancy — the six Rs of sustainable systems. Food value chains that embody the principles of ecological, social, and economic integrity will have all these essential characteristics of sustainable systems. However, maximum economic efficiency conflicts with each of these essential characteristics of sustainability.

The Panarchy theory of ecological systems dynamics was developed in the 1970s to describe the natural behavior of ecological systems.[6] It purports to explain the natural evolution of natural ecosystems. This ecological theory applies to social and economic systems as well, as economies and societies are subsets of nature. As ecosystems naturally evolve toward greater efficiency, they also evolve toward increasing "complexity," meaning an increasing number

[6] Homer-Dixon, T. (2009, March/April). Our Panarchic future. *World Watch Magazine,* 22(2). (Excerpted from *The upside of down: Catastrophe, creativity, and the renewal of civilization,* by T. Homer-Dixon, 2006, Washington, DC: Island Press.) Excerpt retrieved from http://www.worldwatch.org/node/6008

of more highly specialized functions. As systems become more complex, the internal dependencies among the specialized functions increase, which is referred to as increasing "connectivity." Increasing complexity and connectivity increase the efficiency of systems by synchronizing activities and removing redundancies both within and among the various systems functions.

However, as the dependencies are increased and redundancies are removed, ecosystems lose their resistance and resilience and their ability to respond to change. Internal dependencies allow the consequences of outside shocks to spread through the entire system more quickly than for less "connected" systems. Lacking redundancy, efficient systems lose their ability to repel or bounce back from unexpected shocks or to respond to fundamental changes in their environment. Consequently, highly efficient systems are also highly vulnerable to collapse.

As food value chains move toward greater economic efficiency, they face the increasing risks associated with greater complexity and connectivity. Increased economic efficiency will reduce the *resistance, resilience,* and *redundancy* needed for sustainability. As investments become more narrowly focused on economic returns, such systems also will lose their capacities for *renewal* and *regeneration,* as well as the *responsiveness* needed for radical redesign of the food system. The need for greater economic efficiency is real, but efficiency must be balanced with the need for ecological, social, and economic integrity. Food value chains that give priority to economic efficiency may be profitable for a time, but they will not be sustainable over time. Sustainable food value chains must function in harmony and with balance among the essential ecological, social, and economic principles of sustainability.

THE ECONOMIC PAMPHLETEER
Published November 7, 2011

Land Use Planning for Sustainable Food Systems

Original citation: Ikerd, J. (2011). Land use planning for sustainable food systems. *Journal of Agriculture, Food Systems, and Community Development, 2*(1), 3–5. http://dx.doi.org/10.5304/jafscd.2011.021.010

A sustainable food system must be firmly rooted in the wise use of land. Fortunately, local foods initiatives increasingly involve planned uses of agricultural land. While professional planners, architects, and staff of nongovernmental organizations may all be involved, land use planning begins with decisions made by state and local governments. Effective land use planning requires a public consensus to support making land use decisions on some basis other than economic value. Such a consensus ostensibly exists in most urban areas for residential and commercial uses of land, although economic interests typically dominate actual planning and zoning decisions. Public support for planning and zoning of agricultural land in rural areas is even more tenuous. Lack of a public consensus for wise land use planning could become a major obstacle in the development of sustainable food systems, thus the need for greater understanding of the issue.

Sustainability is about the long run: meeting the needs of present generations without diminishing opportunities for generations of the future. Economic value is inherently short-run in nature. In the absence of land use planning, economic incentives allocate parcels of land to their highest economic use. Economic value accrues to the individual. There is no economic value in doing anything solely for the benefit of someone else or for society in general. In addition, there is no means for individuals to realize economic value after they are dead. Since life is inherently uncertain, economic value places a premium on the present relative to the future. It is worth more to the individual to have something today rather than to wait until sometime in the future. That's why people are willing to pay interest — and why they expect interest when they borrow or loan money. For example, at an interest rate of 7%, an economic payoff of $1,000 expected one hundred years in the future is worth less than $1 today. The needs of future generations have little, if any, effect on the economic value of land. Allocating land to its highest economic use simply is not sustainable.

Land must be treated as a common good, rather than private property. There is no inherent problem in allowing users of land to realize economic value from their improvements to land. Individuals should be able to benefit from improving fertility, reducing erosion, or building physical

structures on their land. However, the inherent capacity of the land to produce things of value, including the geographic space occupied by land, wasn't created or produced by any individual. It does not and cannot belong to any individual. It is a part of the commons — meaning if it belongs to anyone, it belongs equally to all. The people in common, not the markets, must decide how land is to be used for the common good — for the good of society as a whole. There is no function of government more critical to sustainability than land use planning.

All natural resources were once in the commons — equally accessible to all. It wasn't until the seventeenth century that John Locke declared that although "God hath given the world to men in common," any individual could appropriate some bit of it for himself by mixing his labor with the resources of nature.[7] This is the classic justification for today's private property rights. However, Locke also wrote the Lockean Proviso, which states that although individuals have a right to acquire private property from nature, they must leave "enough and as good in common...to others."[8] Locke recognized the equal rights of all to the use of land.

Land use planning for sustainable food systems must protect the productive potential of agricultural land. Current agricultural production is supported by cheap and abundant fossil energy. Those of future generations, however, will again have to rely for their food on the solar energy collected by healthy green plants grown on healthy, organic soils. The organic fraction of soil can be restored through wise use over time. However, the mineral fraction of healthy soils and hospitable climates and typographies are essentially nonrenewable resources that must be conserved and recycled in place. In addition, agricultural, residential, and commercial land uses must be integrated in the process of redesigning an efficient food distribution system for a world running out of fossil energy. If we continue to allow parcels of land to be allocated to their highest economic use, enough productive land simply will not be left in the right places to meet the food needs of future generations.

Land use planning for sustainable food systems must protect the productive potential of agricultural land.

Innovative land use planners have already devised various promising strategies for sustainable land use planning. Purchasing development rights for strategically located agricultural land probably is the most prominent. While commendable, the cost of acquiring rights to sufficient quantities of land to meet the food needs of future generations will almost certainly be economically prohibitive. A more promising economic alternative is cluster development, which can realize most of the development value while preserving the most productive agricultural land as key parts of planned developments.

Ultimately, land use decisions must be made for the good of the people in common, including those of the future. This means large acreages of land will have to be permanently zoned for agriculture. Such parcels will lose the portion of their current value associated with potential future development. This development value was created by society, not by landowners, so there is nothing ethically wrong with society taking it back. However, current landowners may have purchased such parcels from someone else at priced inflated by the development potential, which raises legitimate questions of compensation for down-zoning to permanent agriculture.

Planning and zoning decisions obviously create economic value whenever land is up-zoned to

[7] Locke, J. (1690). *The Second Treatise of Civil Government* (Chapter V, Of Property). Retrieved from http://www.constitution.org/jl/2ndtr05.htm

[8] Wikipedia, The Free Encyclopedia, *Lockean Proviso* (last revised 6 July 2011, 22:49 UTC), retrieved 8 March 2011 from http://en.wikipedia.org/w/index.php?title=Lockean_proviso&oldid=438136864

more-intensive uses. Again, such values are not created by landowners, but rather by society. It seems only logical and ethical that increases in land values associated with up-zoning to more-intensive uses be taxed to compensate owners of land that is down-zoned from commercial, residential, or agricultural to "permanently agricultural." Regardless, the means of compensation will become feasible once there is a public consensus supporting sustainable land use planning.

THE ECONOMIC PAMPHLETEER
Published May 25, 2012

Sustainability in Higher Education: Beyond Going Green

Original citation: Ikerd, J. (2012). Sustainability in higher education: Beyond going green. *Journal of Agriculture, Food Systems, and Community Development, 2*(3), 5–7. http://dx.doi.org/10.5304/jafscd.2012.023.009

It is encouraging that a growing number of colleges and universities are making serious efforts to address questions of sustainability in their teaching, research, campus operations, and public relations programs. Some are building green buildings, buying green cleaning supplies, and competing in greenest campus contests. It is also heartening that food and agricultural issues have risen to prominence on green campuses, as food services respond to student demands for local sourcing of foods, composting of food waste, and space for student gardens to produce foods by sustainable methods. While going green is necessary, it is not sufficient.

Authentic sustainability is about meeting the needs of the present without diminishing opportunities for the future. Everything that is used for meeting human needs ultimately must come from either nature or society. The economy provides an efficient means of using natural and societal resources to meet human needs. Ecological integrity, while necessary, is not sufficient to ensure sustainability. A society that is lacking in social or economic integrity cannot sustain ecological integrity. Ecological, social, and economic integrity are inseparable dimensions of the whole of sustainability. Educational programs that focus on a specific ecological, social, or economic dimension of sustainability without effectively addressing the other two may be useful, but they do not address the fundamental question of sustainability.

Furthermore, the responsibility of current generations for the well-being of future generations is an inherently moral or ethical issue. Individuals have no economic or social incentives to invest for the benefit of those of the seventh or seventieth future generation. They won't be able to realize returns on such investments and may not even have any descendants in those generations. Authentic sustainability is deep sustainability; it questions the rightness and goodness of our relationships with other people and with nature. Such questions are the essence of sustainability. Educational programs that fail to address the ethical dimensions of sustainability fail to address authentic sustainability.

Many sustainability education programs fail to address alternative ways of thinking, or simply attempt to modify conventional thinking to accommodate the concepts of sustainability. Such programs fail to recognize that current ways of thinking are a root cause of the current lack of sustainability. To achieve authentic sustainability, societies must evolve to a new understanding of how the world works and the place of humans within it. The paradigms that dominate current thinking view the world as a complex mechanism with many interrelated but separable parts. While these paradigms have proven efficient in extracting economic value from nature and society, mechanistic systems are incapable of the self-renewal and regeneration essential for sustainability. Paradigms for sustainability must view the world as a dynamic living organism with many interrelated and inseparable parts. We humans are not apart from but are part of that holistic organism. Only living systems are capable of relying on solar energy to renew and regenerate the resources of nature and society that must sustain the economy.

Paradigms for sustainability must view the world as a dynamic living organism with many interrelated and inseparable parts. We humans are not apart from but are part of that holistic organism.

Sustainability education must go beyond an understanding of how to use natural and human resources more efficiently and even beyond substituting renewable for nonrenewable sources of energy. Educators must help students understand how to radically redesign current economic and social systems for sustainability. Authentic sustainability in higher education will require very different ways of thinking and learning to accommodate a very different worldview.

The new ways of thinking and learning must mimic those of resourceful, resilient, regenerative living systems. Living systems are made up of components with semipermeable boundaries that are neither closed nor open but instead are selectively permeable. Relationships within living systems are nonlinear, meaning they are characterized by continuous feedback loops which create reoccurring patterns of acceleration, decay, and oscillation. Living systems are self-organizing. They are not precisely predictable, but they have the capacity to learn and to evolve with purpose. Living systems have memory and emergent properties and behaviors that are not characteristic of the parts but arise from relationships within the whole. These new ways of thinking are typically referred to as systems thinking, but they relate specifically to thinking about living systems.

Collaborative learning or co-learning is a means of stimulating and cultivating the new ways of thinking necessary for sustainability. In collaborative learning, some may be conveners and others participants, but there are no teachers or students; all are co-learners. Collaborative learning encourages self-organization with an open flow of knowledge both among and between participants and conveners. It encourages involvement that augments self-acquired knowledge, intelligence, imagination, and intuition. It supports and promotes openness, honesty, and harmony. It creates learning communities where people feel free to share their intellects, ideas, inspirations, and their social and ethical values. Collaborative learning is fundamentally different from traditional paradigms of higher education.

In collaborative learning, some may be conveners and others participants, but there are no teachers or students; all are co-learners.

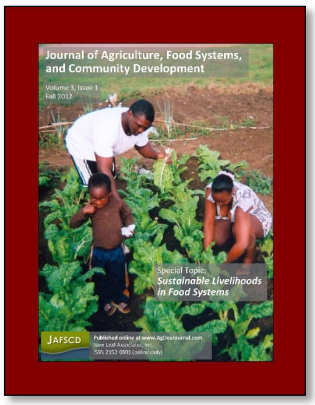
While collaborative learning may sound idealistic or infeasible in today's academic environment, it is not. Recent summer "unconferences" hosted by the Midwest Regional Collaborative for Sustainability Education have brought together practitioners of collaborative learning from a wide variety of educational institutions to share their ideas and experiences.[9] The international faculty of the Nordic Agroecology master's program has developed a collaborative learning process which they characterize as dual learning ladders.[10] Instead of starting at the factual/ conceptual and progressing toward application, they start in the middle of the traditional process by exposing students to real world experience. They respond to students' questions arising from those experiences to expand in both directions, toward the factual/conceptual and the applied. They also envision a corresponding ladder that describes personal reflections of students arising from the learning process in clarification of their personal values and ethics. Thoughtful educators are beginning to address the challenges of authentic sustainability education in very practical ways. The challenge is to go beyond going green and radically redesign higher education to support and encourage these new ways of thinking and learning.

Thoughtful educators are beginning to address the challenges of authentic sustainability education in very practical ways. The challenge is to go beyond going green and radically redesign higher education.

[9] Midwest Regional Collaborative for Sustainability Education. (n.d.) MRCSE Home Page. Retrieved November 23, 2011, from http://www.mrcse.org/

[10] Lieblein, G., Arvid Breland, T., Østergaard, E., Salomonsson, L., & Francis, C. (2007). Educational perspectives in agroecology: Steps on dual learning ladder toward responsible action. *NACTA Journal, 51*(1), 37–44. http://www.umb.no/statisk/studietilbud/dual%20learning%20ladder.pdf

THE ECONOMIC PAMPHLETEER
Published October 18, 2012



Cooperation: The Key to Sustainable Livelihoods in Food Systems

Original citation: Ikerd, J. (2012). Cooperation: The key to sustainable livelihoods in food systems. *Journal of Agriculture, Food Systems, and Community Development, 3*(1), 9–11. http://dx.doi.org/10.5304/jafscd.2012.031.005

Profits are not sustainable in today's food systems, and most certainly not for farmers. The more efficient producers may be able to survive financially, but their potential to do more beyond survival is inherently limited. The economic livelihoods necessary to incentivize the needed transition to a sustainable food system will require fundamental change in today's food economy.

Historically, market economies have been characterized by competition. We typically think of horizontal competition within food retailing, processing, and farming sectors, but competition also occurs vertically throughout the different sectors of the food economy. Such markets are coordinated vertically, from consumers down to farmers, through vertical competition. For example, when consumers demand more of something, prices are raised by retailers to ration the available supplies. Higher retail prices provide profit incentives for retailers to offer higher prices to processors, who then offer higher prices to producers, providing incentives to produce more of the higher-priced products. This process is reversed by weaker consumer demand. Vertical competition reallocates productive resources to accommodate changing consumer demand.

These are basically the conditions under which markets for organic, local, and other sustainably produced foods have grown over the past few decades. For example, as consumers' preferences shifted away from industrially produced foods and toward organic foods, price premiums for organic foods provided both the economic incentives and financial means for organic farmers to expand production. However, market growth does not ensure profitability in market economies, as many organic farmers have discovered.

Competition among enterprises within and among the various sectors of the food system has limited the potential for profits from sales of organic foods. If such markets had been "purely competitive," any excess profits would have been passed on to consumers in the form of larger quantities, lower prices, or higher qualities of organic foods. As long as organic markets grow, profits would be possible for at least some

participants. Once organic markets stabilize, any further potential for "excess profits" would be gone. The remaining "normal profits" would be just enough to keep enough organic farmers and others in business and keep producing, processing, and distributing a stable supply of organic foods. The economic benefits under pure competition accrue to people as consumers, not as retailers, processors, or producers.

That said, the reality of today's American food system is very different from the purely competitive model of free-market economies. Today, large-scale corporate food processors, distributors, and retailers dominate their respective sectors of the food marketing system. Only the farming sector retains any element of true economic competition. Today, a few large corporate processors and retailers dominate their particular sector of the food market, and in many cases, dominate their entire vertical food supply chains, from retailing to agricultural production. These dominant corporations are in a position to retain all excess profits for their stockholders. Consumers' food choices are limited to those products the corporations find most profitable, and farmers are left with even less profit than they would have had under pure competition. The economic power has shifted from consumers to corporate stockholders.

Lack of economic power forces farmers to accept corporate business strategies that deplete the productivity of their soil, pollute the air and water, exploit their workers, and force their neighbors out of farming — just to survive economically.

The last vestiges of vertical competition are rapidly giving way to vertical integration. Under vertical integration, large corporate food retailers essentially control the other levels in the vertical food supply chain, through outright ownership, formal contractual arrangements, strategic alliances, or through sheer market power, as in the case of Walmart. Whole Foods is gaining a similar position in the organic food system. In such cases, the dominant corporations decide what is to be produced, when it is to be produced, how it will be produced, and who will produce it. Vertical integration is a corporate version of "central planning." Lack of economic power forces farmers to accept corporate business strategies that deplete the productivity of their soil, pollute the air and water, exploit their workers, and force their neighbors out of farming — just to survive economically. Such systems simply are not sustainable — ecologically, socially, or economically.

All economic value is derived from nature and society. These are the only possible sources of anything of use to people. However, there are no economic incentives to invest in maintaining the fertility of the land or the productivity of people, unless something of greater economic value is expected in return. Thus, there are no economic incentives to invest in anything for the sole benefit of a community, society, or the future of humanity. Most humans don't make purely economic decisions; they respond to non-economic social pressures and ethical values. However, the large publicly owned, for-profit corporations are not humans. They have no human capacity for social or ethical responsibility. As a result, such corporations feel no guilt or regret when farmers are put under relentless economic pressures to exploit their land, their workers, and their neighbors. This is the natural consequence of corporate vertical integration.

The only sustainable alternative to vertical integration and vertical competition is vertical cooperation. Cooperative relationships are neither competitive nor exploitative; instead, they are mutually beneficial. Within a vertically cooperative food chain, economic benefits would be shared fairly and equitably among consumers, retailers, processors, and farmers. The vertical system would be coordinated through cooperation rather than competition or integration. The participants together would decide what to produce, where and

when it would be available, how it would be produced and processed, and who would produce and process it. They also would agree on pricing arrangements to ensure that consumers get the products they need and want at prices they are willing and able to pay.

Everyone in a sustainable vertical cooperative would receive an economic return adequate for a sustainable livelihood, without exploiting the natural and human resources that must sustain the economic viability of the system over the long run. Fair and equitable economic returns would be sustainable for all participants. The legal organizational structure for vertical cooperation can be a cooperative, a collaborative, or an informal alliance. Members of such organizations will always have economic incentives to pursue their individual self-interests rather than to cooperate for economic sustainability. Thus, sustainable profits will depend on cooperative members consistently expressing their shared social and ethical commitments to the long-term sustainability of their common venture. The key to sustainable livelihoods in food systems is for farmers, processors, retailers, and consumers to form vertical cooperatives with like-minded friends or make friends of like-minded people with whom they choose to cooperate.

The only sustainable alternative to vertical integration and vertical competition is vertical cooperation.

THE ECONOMIC PAMPHLETEER
Published February 5, 2013

Reflections on Cooperation

Original citation: Ikerd, J. (2013). Reflections on cooperation. *Journal of Agriculture, Food Systems, and Community Development, 3*(2), 3–5. http://dx.doi.org/10.5304/jafscd.2013.032.001

When I was growing up in the late '40s and early '50s, the local "farmers' exchange" was where we sold our chickens and eggs and bought feed for our chickens, pigs, and dairy cows. The exchange was operated by a cooperative, the Missouri Farmers Association or MFA. Its jingle on the local radio station proudly proclaimed, "MFA, MFA, it's the profit-sharing way. All agree, plain to see, it's the farmer's friend." I didn't have any reason to doubt its claims.

However, the MFA has long since betrayed its farmer-members' trust by supporting the industrialization of agriculture. During the mid-1990s, the president of the MFA regularly proclaimed that Missouri only needed a few dozen large farming operations, and smaller farmers should look elsewhere for their future. As a young agricultural economist, I had made similar statements. I didn't know any better at the time. The leader of a farmers' cooperative, however, should not have been so naïve — or perhaps uncaring. Economic efficiency is good only insofar as it improves the well-being of people. The large agricultural cooperatives in the U.S. have become virtually indistinguishable from the rest of corporate agriculture.

Consequently, I have been skeptical of cooperation as a strategy for agricultural sustainability. I have been forced to reconsider, however. As I have written previously in this column, I believe we are going to have to re-create the entire food chain linking consumers and farmers, "from dirt to dinner plate." Our current food system is dominated by large corporations that keep relentless pressure on producers to increase economic efficiency in order to maximize returns to their stockholders. This pressure is a natural consequence of "vertical integration." It is more economically efficient to extract and exploit than to renew and regenerate because economic value is inherently short-run in nature. In a struggle for economic survival, farmers are being forced to deplete and degrade the natural and human resources upon which long-run agricultural productivity ultimately depends.

My first thought was that we simply needed to restore true economic competition to the food system. We needed a large number of small farms

and food firms, accurate information about products and prices, and the freedom to make economic choices without coercion or persuasion. If we removed corporate influence and control, we would remove the economic pressure to exploit and extract. We just needed to replace vertical integration with vertical competition.

With further thought, however, I realized that economically competitive markets also are driven toward ever-greater economic efficiency. In truly competitive markets no competitor has the ability to retain profits for itself or its investors. Still, if there is a possibility of increasing economic efficiency at any level within the system, competition will provide a profit incentive to do so. Profits provide economic incentives to expand production, which forces competitors to adopt the same or similar technologies or methodologies "to remain competitive." As producers expand production, prices fall and/or costs increase until initial increases in profits disappear, for everyone.

A similar process takes place at other levels in a vertically competitive system as prices and costs adjust to new technologies. The benefits of economic innovations are eventually reflected in lower product prices or higher-value products for consumers. In a purely competitive market, all benefits from increases in economic efficiency at any level in the food system, including farming, ultimately would be passed on to food consumers. Farmers would remain under continuous pressure to exploit their natural and human resources to remain competitive and ultimately to survive.

Economic efficiency is good only insofar as it improves the well-being of people. The large agricultural cooperatives in the U.S. have become virtually indistinguishable from the rest of corporate agriculture.

As I have indicated in previous columns, I believe sustainability ultimately will depend on replacing vertical integration and vertical competition with vertical cooperation. I started writing about the need for vertical cooperation in 2011, before I learned the United Nations had designated 2012 as the "International Year of Cooperatives." I have continued to read and write about cooperatives during the year. In a vertically cooperative food system, prices at the various levels within the system would be determined though cooperation rather than by competition. There would still be incentives for economic efficiency, in that those who had lower costs would retain greater economic benefits. However, prices at all stages in the system would be set at levels that would not force anyone to exploit and extract to survive economically. Sustainability would take priority over economic efficiency.

Cooperatives' sustainability depends on the willingness and ability to establish and maintain cooperative economic relationships, sustained by social relationships, rooted in shared social and ethical values.

This conclusion complicates economic sustainability in that cooperative relationships are ultimately social and ethical in nature. There is a tendency within the sustainability movement to try to redefine economic value to include social and ethical values. However, economic value, as it is generally understood and reflected in today's economy, is individual, instrumental, and impersonal in nature; it is an exchange value. It is not social or ethical. The decision to cooperate rather than compete, as opposed to cooperating as a means of competing, is a cultural or ethical decision. The actual act of cooperation is inherently personal and

thus social in nature. There will always be some point in time in a cooperative organization where it will be more economically efficient for some members to compete rather than cooperate. Cooperation is rooted in long-run ethical and social values, whereas economic value is inherently short-run in nature.

As we have seen, a legal cooperative business structure will not ensure the type of cooperative relationships necessary for sustainability. I recently spent a month in Poland teaching economic sustainability at the Lublin Institute of Technology. During the trip I was able to talk with members of the National Academies of Science of both the Ukraine and Poland. I thought Eastern Europe might be fertile ground for sustainable cooperation. Instead, I learned the old Soviet Union used cooperatives to impose their will on unwilling rural communities. My contacts there saw little hope for restoring faith in cooperatives as sustainable organizations. Even the classic "Rochdale Principles" for cooperatives,[11] such as open membership, may not be consistent with sustainable social relationships. Classical cooperatives may not be the answer.

Nevertheless, I believe that cooperation, by whatever name, will be essential for sustainability. Sustainable cooperatives may be called alliances, collaboratives, affiliations, networks, or any of a variety of names. Their sustainability will depend on the willingness and ability of people to establish and maintain cooperative economic relationships, sustained by social relationships, rooted in shared social and ethical values. Consequently, learning the art and science of human relationships could well be the greatest challenge of sustainability. 

[11] According to Wikipedia, "The Rochdale Principles are a set of ideals for the operation of cooperatives. They were first set out by the Rochdale Society of Equitable Pioneers in Rochdale, United Kingdom, in 1844, and have formed the basis for the principles on which co-operatives around the world operate to this day." See http://en.wikipedia.org/wiki/Rochdale_Principles

THE ECONOMIC PAMPHLETEER
Published July 8, 2013

Rethinking Science: The Highest Research Priority for the Next 5 Years

Original citation: Ikerd, J. (2013). Rethinking science: The highest research priority for the next 5 years. *Journal of Agriculture, Food Systems, and Community Development, 3*(4), 9–11. http://dx.doi.org/10.5304/jafscd.2013.034.001

At the risk being labeled an uneducated Luddite or a right-wing political conservative, I believe the highest research priority for the next five years should be to rethink science, in concept and in practice. Nowhere is this priority more urgent or important than in research related to food systems, including agriculture. Recent research seems to indicate that overall public confidence in science has remained relatively strong and stable since the 1970s, at least among most Americans (Gauchat, 2012). However, the research indicates that public trust has declined significantly among those who think science should mesh with common sense, who question industrialization, and who are skeptical of the "intellectual establishment."

I am an unabashed advocate of common sense, an open opponent of the industrial paradigm, and a frequent critic of an increasingly arrogant intellectual establishment. I have not lost confidence in science, at least not science defined as a systemic means of acquiring knowledge. I have lost confidence in scientists who insist that "good science" includes only those propositions that have been *proven* using the "scientific method."

The scientific method is a specific process of formulating hypothesis and testing their validity through various structured and systematic means of observation and replication. The scientific method assumes a world of absolute reality, of a unique or singular truth. The purpose of science then is to discover absolute truth. The scientific method also assumes that complex systems can be reduced or separated into their component parts to isolate specific causes of specific effects. Once discovered, the scientific method says that true cause and effect relationships can be verified through replication, since absolute truth for one condition or situation is true of all conditions or situations. Although the truth of a hypothesis can never be proven absolutely, it can be validated or repudiated thorough replication.

The scientific method has proven very effective in acquiring knowledge of the nonliving or mechanistic world. Few would deny the importance of knowledge gained through the scientific method in physics, chemistry, electronics, engineering, or architecture. However, it has been far less effective in providing knowledge of the

living or organismic world. In plant science, animal science, and entomology, for example, unanticipated consequences invariably emerge from actions guided by so-called good science. In the thinking, feeling world of the social sciences, the scientific method has provided little if any advantage over systematic observation and logical synthesis of subjective data guided by common sense. Unfortunately, the most urgent and compelling questions confronting humanity today, including the integrity of the global food system, relate to the living, thinking, and feeling worlds of ecology, economics, and sociology.

The most urgent and compelling questions confronting humanity today, including the integrity of the global food system, relate to the living, thinking, and feeling worlds of ecology, economics, and sociology.

The ecological, social, and economic problems of today are critical and urgent. Thus, the highest priority for food systems research is to rethink and redesign the fundamental concept and practice of science. Nothing less than the future of humanity is at risk. Scientists can no longer afford the luxury of trying to warp and twist the reality of the living, thinking, feeling world to make it conform to the scientific method rather than redesign their methods of scientific inquiry to conform to ecological, social, and economic reality.

The living world is holistic, not reductionist. The first principle of ecology is that everything is interconnected; you can't isolate specific causes or effects from other causes and effects. Plants, animals, and people, economies, and societies are all living, interconnected systems. Unintended consequences must be an integral aspect of the science of living systems. Most scientists understand the limitations of reductionist approaches to research, but they haven't found an effective alternative to the scientific method in claiming credibility for their work.

Rethinking science must begin with rethinking reality. Perhaps living reality is not unique or singular, but exists as *potentials,* as in the subatomic world of quantum reality. Two scientists who draw different conclusions may simply have observed two different potentials of the same reality. If so, the question is not who discovered absolute truth but how knowledge of each potential or dimension of truth contributes to a better understanding of the whole truth. This does not suggest that truth is relative, as was suggested by earlier philosophers, but instead that truth is multidimensional in that it has multiple potentials. Truth cannot be whatever one might want it to be, but only what it has the potential to be. For example, a dog has the potential to be seen as large or small and threatening or friendly, depending on the particular observer. It has multiple potentials. But, it cannot be seen as a cat or snake by any rational observer.

In the living, thinking, and feeling worlds, reality can be seen as the potential "to become" and well as the potential "to be." Thus, scientists who draw different conclusions about the future based on a common understanding of the past and present may simply be seeing different future potentials. The question is not which is right or wrong, but instead which of those future sets of potentials would be best for the future of society and humanity. In a world of potentials, we could choose from a variety of alternative possibilities for our future, rather than accept the prospect of the mechanistic, absolute, predetermined reality of contemporary scientific thinking.

In a holistic world of potentials we could be guided by general principles rather than specific causes and effects. The purpose of science would be to discover underlying principles that characterize the potentials of the world that we want to experience and the world we want to avoid. Some of these principles are self-evident, such as the ecological principles of holism, diversity, and mutuality and the social principles of trust, compassion, and courage. Some of the principles essential for sustainability obviously are yet to be discovered, including the principles necessary to

motivate people to positive action. A sustainable food system is essential for the sustainability of humanity. The highest research priority over the next five years for food systems research, and for research in general, should be to rethink and redesign science to meet the ecological, social, and economic challenges of sustaining humanity. 

Reference

Gauchat, G. (2012). Politicization of science in the public sphere: A study of public trust in the United States, 1974 to 2010. *American Sociological Review, 77*(2) 167–187. http://www.asanet.org/images/journals/docs/pdf/asr/Apr12ASRFeature.pdf

THE ECONOMIC PAMPHLETEER
Published December 8, 2013

Running Out of Land for Food

Original citation: Ikerd, J. (2013). Running out of land for food. *Journal of Agriculture, Food Systems, and Community Development, 4*(1), 7–9. http://dx.doi.org/10.5304/jafscd. 2013.041.008

The challenge of preserving enough farmland for food production will be a defining challenge for the 21st century. Lester Brown, icon of the Worldwatch Institute, identifies food scarcity as "the weak link" of modern society (Brown, 2012). He points to the growing global demand for food and fuel, eroding soils, declining aquifers, and global climate change as major challenges to the future of human civilization. All of these challenges could be met, but not without a fundamental transformation in current ways of thinking about both land and food. A market economy will neither provide food for the hungry of current generations nor preserve enough farmland to provide food for generations of the future. Any society that allows markets to determine how much and what kind of land is used for food is not sustainable. This could be ***the*** defining challenge of the 21st century.

In his classic book *The Great Transformation,* economist Karl Polanyi details the historical consequence of "commodifying" land and labor in futile efforts of capitalists to create a self-regulating, free-market global economy (Polanyi, 1944/1957). Prior to the "enclosure movement," land was held in common, rather than owned by individuals. Land was freely available to everyone to use to meet their basic needs of survival and sustenance. The process of enclosing, or privatizing, the commons began during the 16th century. However, "the years between 1760 and 1820 are the years of wholesale enclosure in which, in village after village, common rights are lost" (Thompson, 1991, p. 217). The industrial revolution and rise of capitalism occurred during this time.

Land had to be privatized and commodified or priced before land use could be determined by market competition rather than community consensus. Only then could the global economy become self-correcting or self-regulating. Labor likewise had to be commodified. The commodification of land essentially forced the commodification of labor, as those without access to land for food were forced to sell their labor to employers in order to survive. However, it seemed that nothing short of the threat of starvation could force people who once had access to land to produce their own food to work for money to buy food. The English Poor Laws were nationalized and expanded in 1834

to cover the entire working class, not just the young, old, and disabled. Various other attempts were made to protect the working class from the social upheaval triggered by removal of land from the commons. Nothing seemed to work.

The right to enough land to grow one's own food was long considered to be a fundamental right under "natural law." In 1690, John Locke proclaimed that land could be ethically removed from the commons only if "...there is enough, and as good, left in common for others" (Locke, 1690, chap. 5, sect. 27). In comparing privatization of land to taking a drink from a flowing stream, he wrote, "And in the case of land and water, where there is enough of both" (Lockean Proviso, n.d., para. 2). Eventually, there was not enough good land left in the commons for those who needed it most.

By 1795, Thomas Paine concluded, "the landed monopoly…has produced the greatest evil. It has dispossessed more than half the inhabitants of every nation of their natural inheritance… and has thereby created a species of poverty and wretchedness that did not exist before" (Paine, 1795, para. 20). Paine was not advocating a return to hunting and gathering. He recognized that agriculture was necessary to support the global population of even his time. He was reaffirming that if land belongs to anyone, it belongs to the people in common, and even if managed privately, it must still be used for the common good.

Paine proposed a universal, lifelong indemnity to compensate the people for their loss of access to the commons. A variety of social welfare and food assistance programs have been tried over the years, culminating in the U.S. with the New Deal and Great Society programs of the 1930s and 1960s, respectively. Nothing has adequately addressed the twin perils of poverty and hunger associated with privatization of land and labor. Experiments with socialism and communism have been frustrated by the same challenges as early social welfare programs. People only seem inclined to work when they have a personal incentive to do so. Since the resurgence of free-market fundamentalism in the 1980s, social welfare and food assistance programs have been under persistent attack. "Poverty and wretchedness" seem destined to continue unabated.

The current global food system is not providing adequate food for much of the world's population today, and it most certainly is not leaving future generations with enough land to meet their needs for food. It is not sustainable. Speculative farmland prices, relentless farmland consolidation, and global "land-grabbing" are all symptoms of a soulless global economy running out of land for food. Rising global food prices have triggered new waves of hunger and starvation. Many families who can afford enough calories are suffering from a variety of diet-related health problems caused by not getting adequate nutrition. Market economies will not provide enough good food for all, and all previous attempts to ameliorate this inherent deficiency have failed. It's time for a fundamental change in thinking about issues of land and food.

Speculative farmland prices, relentless farmland consolidation, and global "land-grabbing" are all symptoms of a soulless global economy running out of land for food.

For example, specific parcels of land could be identified and zoned for use in food production, without depriving individuals of their right to benefit from land improvement. This is not socialism. It is no different in concept from current zoning laws. However, enough land would need to be zoned "permanently" for food production to meet the basic food needs of both current and future generations. This means that the area of land zoned for food would need to be sufficient in both quantity and quality to allow for *sustainable* farming in order to avoid further exploitation.

Admittedly, the "development value" of land currently zoned for agriculture would be lost. Such value, however, is purely speculative, and society has no responsibility to ensure the success of land speculation. Owners of land currently zoned for

higher-valued uses could be compensated for down-zoning to agriculture by taxing away speculative gains in other land that is up-zoned to higher-valued uses. Profits from up-zoning are essential a grant from society, as owners of such land have done nothing to increase its value. Taxing away such profits would also remove economic pressure to up-zone land from agriculture to other uses.

Farming of land that is zoned for food and farmed sustainably could be treated as a public utility, as proposed by Willard Cochrane, secretary of agriculture during the Kennedy administration (Levins, 2000). Sustainable farmers could become independent contractors. Admittedly, this would not solve the hunger problem because hunger is too closely linked with poverty. But, it would ensure there is enough good land left for food when society eventually addresses the problems of poverty caused by the commodification of labor. The more urgent priority is to preserve enough good farmland to provide good food for all, both now and in the future. 

Reference

Brown, L. R. (2012). *Full planet, empty plates: The new geopolitics of food scarcity*. New York: W. W. Norton.

Levins, R. A. (2000). *Willard Cochrane and the American family farm*. Lincoln Nebraska: University of Nebraska Press.

Locke, J. (1690). *Second treatise of government*.

Lockean Proviso. (n.d.). In *Wikipedia*. Retrieved August 5, 2013, from http://en.wikipedia.org/wiki/Lockean_proviso

Paine, T. (1795). *Agrarian justice*. Retrieved from http://www.constitution.org/tp/agjustice.htm

Polanyi, K. (1944/1957). *The great transformation: The political and economic origins of our time*. Boston: Beacon.

Thompson, E. P. (1966/1991). *The making of the English working class*. New York: Penguin.

THE ECONOMIC PAMPHLETEER
Published February 4, 2014

Competition Versus Cooperation

Original citation: Ikerd, J. (2014). Competition versus cooperation. *Journal of Agriculture, Food Systems, and Community Development, 4*(2), 15–17. http://dx.doi.org/10.5304/jafscd.2014.042.001

Cooperation has emerged as a new watchword of the sustainability movement. Those who are concerned about sustainability are encouraged to cooperate rather than compete. Food-related cooperatives include regional food hubs, local food networks, food box schemes, food buying clubs, farmers' markets, community supported agriculture operations (CSAs), and farmer-owned cooperatives. Cooperation is a logical response to the obvious ravages of cutthroat economic competition in the American food system. However, we cannot afford to ignore our basic human tendency to compete.

Obviously, unrestrained competition is not sustainable — in the economy, society, or nature. Contrary to popular opinion, Darwin was not referring solely to competition when he wrote about the origin and evolution of species. Individuals often need to compete for the opportunity to pass on their genes, but cooperation is necessary to actually accomplish conception and successful reproduction. Even organisms that reproduce by simple cell division must have a cooperative environment for the offspring to survive and thrive.

"Survival of the fittest" means survival of those who successfully integrate the seemingly opposite tendencies of competition and cooperation. Healthy living organisms have emergent properties that make them stronger than their individual tendencies to either cooperate or compete. For example, the human body is made stronger by its individual parts that cooperate in sustaining the physical health of the body as they compete for its energy and attention. Throughout human history, whenever cooperative social groups have formed, they have created games, rituals, and other competitive means of assessing worth. Competition is essential to our individual being, cooperation is essential to our social being, and both are essential to being fully human. Both are essential for regeneration, resilience, and reorganization, and thus both are essential for sustainability.

The emerging conflict between competition and cooperation today is reminiscent of the cooperative movement of the late 1800s and early 1900s. Cooperation was a logical defense against the merciless forces of economic competition emerging from attempts to establish a "self-regulating," global economy. Economic

exploitation of the working class was rampant. In his classic book, *The Great Transformation,*[12] Karl Polanyi explains how the competitive forces of capitalism were destroying the social fabric of global society. People attempted to defend themselves by forming cooperative organizations that allowed them to meet their needs without competing.

The situation in the late 1800s and early 1900 was similar to that of the enclosure movement of the late 1700s and early 1800s. Prior to the "great transformation," as the enclosures were called by Polanyi, neither land nor labor could be bought or sold. Both had to be "commoditized" before their use could be guided by the impersonal transactions that advocates of free-market competition thought necessary for economic self-regulation. Capitalists considered government, regardless of its form, to be inherently incapable of directing the use of land and labor to meet the needs of society. They believed all such decisions should be left to the impersonal forces of competitive free markets. Adam Smith's "invisible hand" would transform individual greed into societal good. There was no recognition of either the vulnerability or value of society and nature, other than as untapped reservoirs of economic value.

"Survival of the fittest" means survival of those who successfully integrate the seemingly opposite tendencies of competition and cooperation.

The social fabric of families, communities, and societies, knitted and bound by personal relationships, were being ripped apart by the forces of impersonal economic transactions. Nineteenth-century governments were incapable of stemming the tide of free-market capitalism. It was left to people to defend themselves, which they did by forming various kinds of cooperative organizations.

As the cooperative movement grew, its various and diverse elements coalesced and became part of the Progressive political movement of the early-twentieth century. The government became a means of national defense against the social devastations of free markets. Child labor laws, labor unions, direct election of senators, women's suffrage, antitrust laws, and progressive income taxes were early battles won on behalf of society. The New Deal in the '30s brought victories for Social Security and unemployment benefits; the Great Society of the '60s added civil rights protection, Medicare, and Medicaid. As government took responsibility for protecting society from competition, the cooperative movement receded, its mission seemingly accomplished. The environmental movement of the '60s and '70s extended government protection to nature as well as society.

However, the capitalists regrouped and fought back — with a vengeance. Runaway inflation during the '70s and the global recession of the '80s were labeled as inevitable consequences of government interference in markets that otherwise would be capably self-regulating. Capitalists pointed to the fall of the Soviet Union as proof that governments are inherently incapable of regulating the use of land and labor. "Government is not a solution to our problem, government is the problem." Reaganomics marked a return to the economic fundamentalism of self-regulating markets. All restraints on the economic exploitation of land and labor, meaning nature and society, would be removed to allow free-market competition to regulate the economy. "There is no alternative," insisted British Prime Minister Margaret Thatcher.

The recent resurgence of cooperatives is a logical response to the resurgence of unrestrained capitalism. The economic and political inequities of today surpass even those of the early 1900s. Capitalists have succeeded in making our government "intentionally dysfunctional" to limit its ability to interfere in the economy. We must reclaim our

[12] Polanyi, K. (1944/1957). *The great transformation: The political and economic origins of our time.* Boston: Beacon Press.

government, but we must not repeat the mistake of expecting an *impersonal* government to restore inherently *personal* social and ethical relationships. Social ethics, such as honesty, fairness, responsibility, respect, compassion, and love, evolve out of our personal connectedness to each other. Cooperation is not only a means of defense; it also is a means of realizing the fullness of life. Government is necessary to enforce the consent of the governed, but the consent "to be governed" must arise from trusting, caring cooperative relationships.

Nor can we afford to repeat the mistake of planned economies by denying the inherent tendency of people to compete. Competition is the means by which we find our place within society by comparing ourselves to others. Through competitive self-comparisons, day by day we discover our life's purpose. The old cliché is actually true: Constructive competition is not about winning or losing, but about discovering how well we can play the game. Competition is the means by which we discover our uniqueness; cooperation is the means by which we discover our connectedness. Competition can be constructive, however, only if we cooperate in establishing the rules and bounds within which we compete. A sustainable economy will not deny competition — but will allow competition only within bounds established and sustained by cooperation.

Competition is the means by which we discover our uniqueness; cooperation is the means by which we discover our connectedness.

THE ECONOMIC PAMPHLETEER
Published May 16, 2014

Limits to Economic Growth

Original citation: Ikerd, J. (2014). Limits to economic growth. *Journal of Agriculture, Food Systems, and Community Development, 4*(3), 15–18. http://dx.doi.org/10.5304/jafscd.2014.043.006

This is the first of two columns dealing with questions of economic growth. See the second column in the summer 2014 issue.

I am often asked why so few agricultural economists seem interested in sustainable agriculture or sustainable community development. Perhaps it's because unlimited growth is one of the foundational assumptions of neoclassical economics. If there are no limits to economic growth, questions of sustainability are needless or pointless. Ecological economists challenge this assumption and call for a *steady-state economy,* meaning one "that develops qualitatively without growing quantitatively… maintained at a level that is both sufficient for a good life and within the assimilative and regenerative capacities of the [natural] ecosystem" (Daly, 2013). However, most economists seem to believe that human imagination and creativity is capable of finding a substitute for any natural resource we may deplete and finding a technological solution for any problem we might create — given adequate economic incentives.

One argument for unlimited economic growth is limitless *dematerialization,* meaning an infinite ability to extract more economic value from fewer natural and human resources. As ecological economists point out, this conflicts directly with the law of entropy, which is the second law of thermodynamics. Everything of any use to us, including everything of economic value, ultimately depends on the usefulness of energy. According to the law of entropy, whenever energy is used to do anything useful, some of its usefulness is lost. Accepting the law of entropy, there are physical limits to dematerialization and thus limits to economic growth. Unlimited economic growth would require *ephemeralization,* a term coined by Buckminster Fuller, meaning the ability of technological advancement to do "more and more with less and less until eventually you can do everything with nothing" (Ephemeralization, 2013, para. 1). It doesn't seem reasonable to bet the future of humanity on this possibility.

Another assumption seems to be that unlimited economic value could be created through reliance on renewable human intellect or personal services rather than nonrenewable natural resources — a service economy. However, the

human processes of thinking, creating, or providing personal services are inherently dependent on biological energy. The human brain accounts for about one-fifth of the total energy needed to fuel the human body. Thus, the limits of dematerialization apply even to human imagination and creativity. The only remaining possibility for unlimited economic growth would be to rely on human imagination to create unlimited growth in the *nonmaterial* economy — meaning *increases* in economic value that requires no *additional* physical materials or energy.

We need to keep in mind firstly that economic value is inherently *individual, instrumental,* and *impersonal* in nature. Thus, economic growth would need to be in things that are of perceived benefit to people as *individuals* that can be bought, sold, or traded for something of greater *instrumental* value through *impersonal* markets. And then we need to remember secondly that the *growth* in economic value could not require additional human energy, which would violate the law of entropy. In other words, the unlimited increases in economic value would need to be achieved within the context of a "steady-state economy."

Nonmaterial production of economic value is quite possible. For example, when we participate in a fair trade, the additional or marginal increase in economic value is nonmaterial in nature. The same physical products are just worth more to their new owners. Anytime a new product is created that has *greater* economic value than the product it replaces, without using more physical or energy resources, the marginal increase in economic value is nonmaterial. The challenge is to sustain *unlimited increases* in *economic value* by creating ever-larger quantities of *nonmaterial* economic value.

In order to sustain unlimited economic growth, there first must be limitless growth in consumer demand for nonmaterial products. The number of consumers cannot grow indefinitely because human population must respect the limited physical carrying capacity of the earth. This means *individual* consumers must be persuaded or convinced that they need, or at least want, infinite quantities of things of economic value that are nonmaterial in nature. In addition, these things cannot be purely *personal* or *non-instrumental* in nature, which would be of social and ethical value but of no economic value. An insatiable nonmaterial demand would require a relentless barrage of persuasive advertising, planned obsolescence, and conspicuous spending or hoarding of nonmaterial goods and services.

Second, to sustain this unlimited economic growth consumers must have the economic means of sustaining unlimited growth in demand. The creation of nonmaterial economic value would be the only source of the additional income needed to sustain unlimited growth in consumer demand. This means the increase in nonmaterial products would need to be *consumed* in large part, if not exclusively, by people who have an unlimited ability to *produce* nonmaterial products. In other words, there would need to be an infinite supply of the intellectual talent capable of producing new nonmaterial products of ever-greater economic value.

Nonmaterial production of economic value is quite possible. For example, when we participate in a fair trade, the additional or marginal increase in economic value is nonmaterial in nature. The same physical products are just worth more to their new owners.

All of this would need to be accomplished without increasing the use of energy or claims on the natural or human resources needed to sustain the steady-state material economy. The ability to sustain economic growth would still depend on sustaining an adequate throughput of physical energy to sustain the human resources needed to continually grow the nonmaterial economy. Although the material fraction or percentage of the total economy would grow ever smaller over time, the nonmaterial growth in productivity would still be dependent on the material fraction of the

economy. Even if all of this were possible, the fact that we could do something doesn't mean we should try to should do it or would even want to do it.

This discussion might seem a meaningless mental exercise if we were not already seeing signs of growing reliance on nonmaterial economic growth: persuasive advertising, planned obsolescence, and conspicuous spending and hoarding. Nonmaterial growth comes at a cost. For example, the prevalence of self-interest, narcissism, or greed would need to double every 25 years to sustain an annual growth rate of only 3 percent in nonmaterial demand. The wealth of those producing for the nonmaterial economy would grow exponentially in relation to those who support the steady-state material/ energy economy. Economic inequity, social isolation, and psychological depression, which are already problems, would grow without end. This seems a high price to pay to avoid limits to growth — even for economists. 

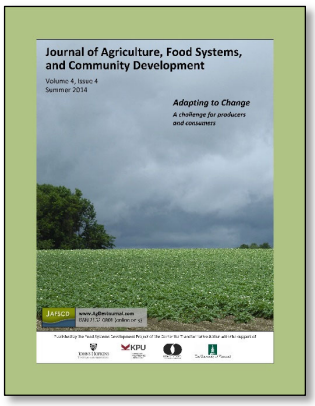
This discussion might seem a meaningless mental exercise if we were not already seeing signs of growing reliance on nonmaterial economic growth: persuasive advertising, planned obsolescence, and conspicuous spending and hoarding.

References

Daly, H. (2013, October 29). Top 10 policies for a steady-state economy [Web log post]. Retrieved from http://steadystate.org/top-10-policies-for-a-steady-state-economy/

Ephemeralization. (2013, December 31). In Wikipedia, The Free Encyclopedia. Retrieved April 13, 2014, from http://en.wikipedia.org/w/index.php?title=Ephemeralization&oldid=588472670

THE ECONOMIC PAMPHLETEER
Published July 28, 2014



Beyond Economic Growth

Original citation: Ikerd, J. (2014). Beyond economic growth. *Journal of Agriculture, Food Systems, and Community Development, 4*(4), 13–15. http://dx.doi.org/10.5304/jafscd.2014.044.002

This is the second of two columns dealing with questions of economic growth. See the first column in the spring 2014 issue.

We need a new vision of the future of agriculture, food systems, and communities. Most Americans seem preoccupied with a vision of economic growth — restoring it, promoting it, and sustaining it. They are unwilling to accept the fact that not only is economic growth not sustainable; it also is no longer either necessary or desirable. We need a new vision that will not compel people to "sell themselves for the means of life" but instead use their time, talents, and energy to "cultivate into fuller perfection, the art of life itself" (Keynes, 1931/1962, p. 368).

The consensus of research into psychological well-being or happiness indicates that beyond some modest level of economic well-being, happiness is related far more closely to the quality of social relationships and a sense of purpose in life than with additional income or wealth (Jackson, 2011; James, 2003). For example, a 2003 article in the *Guardian* references a recent British Cabinet report and concluded that "despite huge increases in affluence compared with 1950, people throughout the developed world report no greater feelings of happiness" (James, 2003, para. 4). Certainly, people in some areas of the world still need economic growth. However, the so-called developing nations need not aspire to the economies needed to support American lifestyles. A 2004 review of more than 150 scholarly studies concluded that beyond per-capita incomes of around US$10,000 to US$15,000 in developing nations, there is little if any correlation between increasing wealth and overall happiness or well-being (Diener & Seligman, 2004). There is no reason to believe this relationship has change in the past decade.

Other research indicates people in nations with less disparity or inequity in incomes and wealth tend to be happier, regardless of absolute levels (Wilkinson & Pickett, 2009). Even the affluent are happier in more economically equitable societies. *Developed* countries might do far more to increase collective well-being or happiness by improving economic equity rather than promoting economic growth. *Developing* countries could benefit most by

balancing their modest needs for economic growth with the need to build more economically equitable societies.

Interestingly, John Maynard Keynes, arguably the most influential economist of the 20th century, anticipated such a time back in the 1920s. He wrote, "the *economic problem* may be solved, or be at least within sight of solution, within a hundred years. This means that the economic problem is not…*the permanent problem of the human race*" (Keynes, 1932/1962, p. 366; emphasis in original). Man's permanent problem will be "how to use his freedom from pressing economic cares…to live wisely and agreeably and well" (Keynes, 1931/ 1962, p. 367). As it turned out Keynes was too conservative, as the research shows the economic problem was solved as early as the 1950s for many people of the world. The challenge for the vast majority of Americans today is not to try to restore unsustainable economic growth, but instead to learn to live "wisely and agreeably and well."

Happiness is related far more closely to the quality of social relationships and a sense of purpose in life than with additional income or wealth.

Our ability to continue to live well economically in the future will depend on the sustainable use of the human and natural resources necessary to sustain the economy. There are endless possibilities, however, for human betterment or improving quality of life even with a sustainable, "steady-state" economy. Ecological economist Herman Daly defines a steady-state economy as "one that develops qualitatively…without growing quantitatively in physical dimensions;…a constant metabolic flow of resources from depletion to pollution…maintained at a level that is both sufficient for a good life and within the assimilative and regenerative capacities of the containing ecosystem" (Daly, 2013, para. 1). A steady-state economy would depend on *qualitative* rather than *quantitative* development to sustain a *good life* for all.

Shifting priorities to social and ethical progress would free up vast quantities of economic resources.

John Stuart Mill, a prominent 19th century economist, also believed in the prospects for continuing human betterment within a "stationary state" economy. He wrote: "It is scarcely necessary to remark that a stationary condition of capital and population implies no stationary state of human improvement. There would be as much scope as ever for all kinds of mental culture, and moral and social progress; as much room for improving the Art of Living, and much more likelihood of its being improved, when minds ceased to be engrossed by the art of getting on" (Mill, 1848/1909, para. IV.6.9).

A fundamental difference between moral and social progress and economic progress is that social and ethical well-being are inherently *nonmaterial* in nature. Progress in these dimensions of life require no *additional* natural or human resources or *materials*. Thus economic growth is not necessary to continue developing human capacities to live more "wisely and agreeably." In addition, shifting priorities to social and ethical progress would free up vast quantities of economic resources, such as those used for national defense, law enforcement, and civil litigation, which could then be devoted to restoring the integrity of the natural ecosystem and remediating dysfunctional societies. If by chance humanity were to reach a state where people no longer desired anything more — economic, social, or ethical — there would be no need for further growth in any dimension of life.

The virtues of social and moral betterment have been proclaimed by all of the enduring philosophies and major religions of the world throughout human history. The American preoccupation with unending economic growth emerged only about one hundred years ago and has

only been dominant since the1980s. It seems reckless if not irrational to bet the future of humanity on the "new theology" of economic growth — particularly since there are far better alternatives for achieving a fundamentally better, more sustainable quality of life.

However, Keynes warned that "no country and no people…can look forward to the age of leisure and abundance without a dread. For we have been trained too long to strive and not to enjoy" (Keynes, 1931/1962, p. 368). He suggested that those who would benefit from this new era would be "those peoples, who can keep alive, and cultivate into a fuller perfection, the art of life itself and do not sell themselves for the means of life" (Keynes, 1931/1962, p. 368). We need a new vision of the future of agriculture, the food system, and communities in which people do not feel compelled to "sell themselves for the means of life" but instead "cultivate into fuller perfection, the art of life itself," by learning to live wisely, agreeably, and well. 

References

Daly, H. (2013, October 29). Top 10 policies for a steady-state economy [Web log post]. Retrieved from the Center for the Advancement of the Steady State Economy (CASSE) website: http://steadystate.org/top-10-policies-for-a-steady-state-economy/

Diener, E., & Seligman, M. (2004). Beyond money. *Psychological Science in the Public Interest, 5*(1), 1–31. http://dx.doi.org/10.1111/j.0963-7214.2004.00501001.x

Jackson, T. (2011). *Prosperity without growth: Economics for a finite planet.* Oxford: Earthscan.

James, O. (2003, May 17). Children before cash; better childcare will do more for our wellbeing than greater affluence. *The Guardian.* Retrieved from http://www.guardian.co.uk/society/2003/may/17/children.healthandwellbeing

Keynes, J. M. (1931/1962). *Essays in persuasion.* New York: W. W. Norton.

McKibben, B. (2007). *Deep economy: The wealth of communities and the durable future.* New York: Times Books, Henry Holt & Co.

Mill, J. S. (1848/1909). *Principles of political economy with some of their applications to social philosophy* (Book IV, Chapter VI). Retrieved from http://www.econlib.org/library/Mill/mlP61.html

Wilkinson, R, & Pickett, K. (2009). *The spirit level: Why greater equality makes societies stronger.* New York: Bloomsbury.

THE ECONOMIC PAMPHLETEER
Published December 19, 2014

Multifunctionality: A New Future for Family Farms

Original citation: Ikerd, J. (2014). Multifunctionality: A new future for family farms. *Journal of Agriculture, Food Systems, and Community Development, 5*(1), 11–13. http://dx.doi.org/10.5304/jafscd.2014.051.016

I was surprised to have been asked recently by the Food and Agricultural Organization (FAO) of the United Nations to write a policy paper on family farming in North America in recognition of the International Year of the Family Farm (Ikerd, 2014). I questioned whether the FAO actually wanted me to write the paper, because of my non-conventional views of American agriculture. In the process, however, I discovered that much of the rest of the world is awakening to the realization that the values of traditional family farming are essential to ensure global food security. The U.S., Canada, and Australia have found few allies in their championing of industrial agriculture as being necessary to avoid massive hunger in the future.

The concept of multifunctional agriculture, as commonly used in international trade and policy discussions, refers to the multiple potential benefits of agriculture, emphasizing the importance of non-economic benefits of agriculture. Farms in this context are inherently multifunctional in that they have multiple ecological, social, and economic impacts on nature and society. A global report, *Agriculture at a Crossroads,* points out that multifunctional agriculture "provides food, feed, fiber, fuel and other goods…has a major influence on other essential ecosystem services such as water supply and carbon sequestration or release…plays an important social role, providing employment and a way of life…is a medium of cultural transmission and cultural practices worldwide…[and] provide[s] a foundation for local economies" (International Assessment of Agricultural Knowledge, Science, and Technology for Development [IAASTD], p. 6).

The report also points out that "sustainable development is about meeting current needs without compromising the ability of future generations to meet their own needs. It is indisputable that agriculture as a sector cannot meet this goal on its own. Agriculture, however, fulfills a series of additional goals besides food production. Last but by no means least, agriculture ensures the delivery of a range of ecosystem services. In view of a globally sustainable form of development, the importance of this role may increase and become central for human survival on this planet" (IAASTD, p. 15). At least four recent UN-sponsored global reports

have confirmed that multifunctional farming is the best hope for global food security and agricultural sustainability (Kirschenmann, 2012).

Sustainable farms are unique in that they are *intentionally* multifunctional. They are intentionally managed to provide multiple positive benefits, not only for the economic bottom line. The global food policy agenda is being shifted toward agricultural sustainability by the growing realization that industrial agriculture is inherently incapable of providing long-run global food security. In retrospect, many so-called developing nations see the Green Revolution as a failure. It failed to provide food for those who were hungry because most hungry people are poor. Many subsistence family farmers were displaced, leaving them without their previous means of meeting the basic food needs of their families.

Farms managed solely or even predominately for the economic bottom line are managed *monofunctionally,* even though they have multiple impacts on communities and ecosystems. Agricultural industrialization is motivated by economic efficiency and thus industrial farms, including those of the Green Revolution, are managed monofunctionally — even if they are owned and operated by families. There is no economic value in doing anything for the sole benefit of society as a whole or the future of humanity. The myopic pursuit of economic efficiency inevitably degrades natural ecosystems and degenerates societies. Monofunctional farms are not sustainable.

Historically, family farms have been held in cultural positions of high esteem. Thomas Jefferson, for example, believed strongly that the "yeoman farmer" best exemplified the kind of "independence and virtue" essential for democracy. He did not believe financiers, bankers, or industrialists could be trusted to be responsible citizens. Adam Smith, an icon of capitalism, 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 and distrusted corporations in particular. The philosophy of Confucius ranked farmers second only to academics and scholars in the Chinese social order, who were then followed by workers, and lastly, businessmen. All of these respected historical figures placed farmers at or near the top of society and those concerned with business and economics at the bottom.

Many farms today share far more characteristics with the businessmen, financiers, and corporate managers distrusted by Jefferson, Smith, and Confucius than with the farmers valorized in past cultures.

Today, Americans are being subjected to an ongoing multimillion-dollar corporately funded propaganda campaign designed to convince us that today's conventional farm businesses deserve the same high esteem historically reserved for family farmers (Lappe, 2011). All family-owned or -operated farm businesses are being portrayed as "modern family farms," suggesting they possess the same values and virtues of the family farmers idealized by Jefferson and Smith. In truth, many farms today share far more characteristics with the businessmen, financiers, and corporate managers distrusted by Jefferson, Smith, and Confucius than with the farmers valorized in past cultures.

The core "culture" of agriculture embodied in family farming is one of stewardship or caring for the land, society, and humanity.

The family farms deemed uniquely worthy of high esteem were *intentionally* multifunctional family farms. They were managed to provide positive ecological, social, and economic benefits. On a true family farm, the farm and the family are inseparable. This

sense of personal interconnectedness of the family with the farm is ultimately what makes a farm a "family farm" and a family a "farm family." The same farm with a different family would be a different farm, and the same family with a different farm would be a different family. The well-being of the farm is inseparable from the well-being of the family.

A true family farm is managed to reflect the cultural and social values of the farm family as well as their economic necessities and preferences. The core "culture" of agriculture embodied in family farming is one of stewardship or caring for the land, society, and humanity. The core social value of family farming is one of neighborliness and caring for community and society. At the same time, a true family farm must also provide the economic essentials of a desirable quality of life. These were the virtues of farming idealized by past cultures and are the virtues still essential for global food security and agricultural sustainability.

Family farmers have the advantages of a natural motivation and an inherent potential to farm sustainably. Intentionally multifunctional farms need not be owned or operated by families, but they must reflect the traditional cultural and social values of family farmers. Returning multifunctional farming to its honored, almost sacred, position in the cultures of North America and the world promises a bright, new future for family farming.

References

Ikerd, J. E. (2014). Family farms of North America [North American regional perspective]. In Food and Agriculture Organization of the United Nations (Ed.), *Deep Roots* (pages 30–32). Rome: FAO. Retrieved from http://www.fao.org/3/a-i3976e.pdf

International Assessment of Agricultural Knowledge, Science, and Technology for Development (IAASTD). (2009). *Agriculture at a crossroads: Global report.* Washington, D.C.: Island Press. Retrieved from http://www.agassessment.org/reports/IAASTD/EN/Agriculture%20at% 20a%20Crossroads_Global%20 Report%20 (English).pdf

Kirschenmann, F. (2012, Winter). The challenge of ending hunger. *Leopold Letter, 24*(4), 5. Retrieved from the Leopold Center for Sustainable Agriculture website: http://www.leopold.iastate.edu/news/leopold-letter/2012/winter/future

Lappe, A. (2011, September 27). Who's behind the US Farmers & Ranchers Alliance and why it matters [Web log post]. Retrieved from http://grist.org/factory-farms/2011-09-26-whos-behind-the-u-s-farmers-ranchers-alliance-and-why-it-m/

THE ECONOMIC PAMPHLETEER
Published February 10, 2015

Food Sovereignty: A New Mandate for Food and Farm Policy

Original citation: Ikerd, J. (2015). Food sovereignty: A new mandate for food and farm policy. *Journal of Agriculture, Food Systems, and Community Development, 5*(2), 11–14. http://dx.doi.org/10.5304/jafscd.2015.052.004

The historical justification for farm policy and other public policies related to agriculture has been *food security*. Contrary to current indications, farm policies should serve the common interests of the public rather than the individual interest of farmers. The U.S. Department of Agriculture (USDA) defines food security as "access by all people at all times to enough food for an active, healthy life" (USDA-ERS, 2014, para. 1). Unfortunately, the emphasis of both farm and food policy in the U.S. has been to providing enough "calories" to support active lifestyles, while placing little emphasis on health. USDA nutrition programs focus on education, clearly placing the responsibility for healthy diets on informed consumers rather than caring politicians.

Early U.S. farm policies emphasized keeping enough socially responsible family farmers on the land to produce enough healthful food to meet the basic needs of all. However, the priorities of farm policies shifted during the 1960s and '70s to focus on increasing agricultural productivity. Lower agricultural production costs were expected to result in lower retail food prices, making enough healthful food affordable for everyone. The farm policies of choice consistently promoted the industrialization of agriculture: specialization, standardization, and consolidation into fewer, larger farming operations. The message sent to farmers by this "cheap food policy" was to either "get big or get out."

Agricultural industrialization succeeded in reducing production costs, but failed in its fundamental purpose of providing food security. The percentage of food insecure people in the U.S. today is greater today than during the 1960s, when the shift in farm policies began. The 1968 CBS video documentary, *Hunger in America,* referred to 10 million hungry Americans (Davis & Carr, 1968). The U.S. population in 1968 was 200 million, meaning about 5 percent of Americans were food insecure. The public outrage resulting from the documentary led to dramatic changes in food assistance programs, which virtually eliminated hunger within a decade. Forty-five years later, in 2013, 15% of adults were food insecure, and more than 20% of American children lived in food insecure homes

(Coleman-Jensen, Gregory, & Singh, 2014).

Furthermore, the industrial food system is linked to a different kind of food security problem: unhealthy foods. A recent global report by 500 scientists from 50 countries suggested that "obesity is [now] a bigger health crisis than hunger" (Dellorto, 2012). The U.S. obesity rates in 2012 were 27% for adults (Sharpe, 2013), 18% for children, (ages 6 to 11), and 21% for adolescents (ages 12 to 19 years) (CDC, 2014). More than one-third of children and adolescents were either overweight or obese (CDC, 2014). Furthermore, obesity has more than doubled in children and quadrupled in adolescents over the past 30 years — the era of agricultural industrialization. It's clearly time for a new mandate for farm and food policy.

Obesity has more than doubled in children and quadrupled in adolescents over the past 30 years — the era of agricultural industrialization. It's clearly time for a new mandate for farm and food policy.

Food sovereignty is a term coined in 1996 by Via Campesina, an organization of 148 international organizations advocating family farm–based, sustainable agriculture (Via Campesina, n.d.). Megan Carney contrasts the competing policies of food sovereignty and food security in a 2012 article in the *Journal of Agriculture, Food Systems, and Community Development* (Carney, 2012). The food sovereignty movement is an explicit rejection of the industrial agriculture polices forced upon "lesser-developed" nations under the guise of promoting food security. The poster child for these policies, the Green Revolution, is heralded as a great success in the U.S. but is despised by many in the parts of the world most directly affected.

In the words of Vandana Shiva, a globally prominent ecologist and Indian food activist, "The Green Revolution has been a failure. It has led to reduced genetic diversity, increased vulnerability to pests, soil erosion, water shortages, reduced soil fertility, micronutrient deficiencies, soil contamination, reduced availability of nutritious food crops for the local population, the displacement of vast numbers of small farmers from their land, rural impoverishment and increased tensions and conflicts" (Shiva, 1991, para. 1). Stacia and Kristof Nordin, long-time farming consultants in Africa, have concluded: "Farmers throughout the world were encouraged to convert from their conventional agricultural practices to the new improved [Green Revolution] methods….We are only now beginning to see some of the long term results, but it would seem that instead of ending world-wide hunger, the Green Revolution has actually fostered it" (Nordin & Nordin, n.d., para. 3).

During a global Forum for Food Sovereignty in Sélingué, Mali, in February 2007, about 500 delegates from more than 80 countries adopted the "Declaration of Nyéléni" (Nyéléni, 2007). It defines food sovereignty as "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies, rather than the demands of markets and corporations" (para. 3).

The declaration continues that food sovereignty "guarantees just incomes to all peoples as well as the rights of consumers to control their food and nutrition. It ensures that the rights to use and manage lands, territories, waters, seeds, livestock and biodiversity are in the hands of those of us who produce food" (Nyéléni, 2007, para. 3). It offers a strategy to resist, dismantle, and replace the current corporate trade and food regime with "food, farming, pastoral and fisheries systems determined by local producers and users" (Nyéléni, 2007, para. 3). It promotes transparent trade and prioritizes local markets over national and global markets.

Food sovereignty also calls for "new social relations, free of oppression and inequality between men and women, peoples, racial groups, social and economic classes and generations" (Nyéléni, 2007,

para. 3). It "empowers peasant and family farmer-driven agriculture, artisanal-fishing, pastoralist-led grazing, and food production, distribution and consumption based on environmental, social and economic sustainability" (para. 3). Finally, "it defends the interests and inclusion of the next generation" (para. 3).

Agricultural industrialization has failed to provide food security either in the U.S. or anywhere else in the world. It's time for a new public policy mandate, domestically and internationally. The principles of food sovereignty obviously need to be interpreted differently in different countries, but its basic principles are just as valid in the U.S. as elsewhere. The right to food must be recognized as a basic human right, not left to the vagaries of charity or the indifference of the marketplace. Markets have never provided food security and never will.

The right to food must be recognized as a basic human right, not left to the vagaries of charity or the indifference of the marketplace. Markets have never provided food security and never will.

Farm policies to ensure food sovereignty support self-determination, relocalization, beneficial trade, environmental protection, land stewardship, social justice, and intergenerational equity. Food sovereignty is the logical public policy mandate to support agricultural sustainability and a sustainable future for humanity.

References

Carney, M. (2012). "Food security" and "food sovereignty": What frameworks are best suited for social equity in food systems? *Journal of Agriculture, Food Systems, and Community Development, 2*(2), 71–88. http://dx.doi.org/10.5304/jafscd.2012.022.004

Centers for Disease Control and Prevention. (2014, December 11). *Childhood obesity facts.* Retrieved from http://www.cdc.gov/healthyyouth/obesity/facts.htm

Coleman-Jensen, A., Gregory, C., & Singh, A. (20141). Household food security in the United States in 2013 (Economic Research Report No. 173). Washington, D.C.: USDA-ERS. Retrieved from http://www.ers.usda.gov/media/1565415/err173.pdf

Davis, P., & Carr, M. (Writers). (1968). Hunger in America, part I. In D. Hewitt (Executive producer), *CBS Reports: Hunger in America.* New York: Columbia Broadcasting System. Retrieved from YouTube: https://www.youtube.com/watch?v=h94bq4JfMAA

Dellorto, D. (2012, December 14). *Obesity bigger health crisis than hunger* (CNN News global report). Retrieved from http://www.cnn.com/2012/12/13/health/global-burden-report/

Nordin, S., & Nordin, K. (2000). *Green Revolution fails.* Retrieved from the Never Ending Food website: http://www.neverendingfood.org/articles/how-the-green-revolution-has-failed-to-feed-us/

Nyéléni. (2007). *Declaration of Nyéléni.* Retrieved from http://nyeleni.org/spip.php?article290

Sharpe, L. (2013). *U.S. obesity rate climbing in 2013.* Retrieved from http://www.gallup.com/poll/165671/obesity-rate-climbing-2013.aspx

Shiva, V. (1991). The Green Revolution in the Punjab. *The Ecologist, 21*(2), 57–60. Retrieved from the Living Heritage website: http://livingheritage.org/green-revolution.htm

U.S. Department of Agriculture, Economic Research Service. (2014). Overview [Food and Nutrition Assistance]. Retrieved January 22, 2015, from http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us.aspx

Via Campesina. (n.d.). In *Wikipedia.* Retrieved January 22, 2015, from http://en.wikipedia.org/wiki/Via_Campesina

THE ECONOMIC PAMPHLETEER
Published April 29, 2015

Can Small Farms be Sustained Economically?

Original citation: Ikerd, J. (2015). Can small farms be sustained economically? *Journal of Agriculture, Food Systems, and Community Development, 5*(3), 9–11. http://dx.doi.org/10.5304/jafscd.2015.053.001

Are small farms economically sustainable? Not according to a recent opinion piece in the *New York Times* written by Bren Smith, a small-scale farmer: "The dirty secret of the food movement is that the much-celebrated small-scale farmer isn't making a living. After the tools are put away, we head out to second and third jobs to keep our farms afloat…Health care, paying for our kids' college, preparing for retirement? Not happening" (Smith, 2014, para. 2).

Another widely shared opinion piece by a small-scale farmer, Jaclyn Moyer, began: "People say we're 'rich in other ways,' but that doesn't fix the ugly fact that most farms are unsustainable" (Moyer, 2015, para. 1). Jaclyn was asked by a student if her farm was sustainable. She replied that her farm was certified organic and conserved water, but later reflected: "I didn't think my farm was sustainable. Like all the other farms I knew, my farm relied on uncompensated labor and self-exploitation…I knew the years my partner and I could continue to work without a viable income were numbered" (Moyer, 2015, para. 22).

Both Smith and Moyer were distressed by how much work was required for the small amount of money they were able to earn on their small-scale farms. They both claim that few farmers they know are able to make what they consider an acceptable income farming. However, many non-farm couples both work long hours at good-paying jobs and are barely able to make ends meet. It takes all of their time and energy to earn enough money to support their chosen lifestyle—much like many farm couples. What matters is whether such couples are able to pursue their chosen way of life, not how much money they earn and spend in the process.

There is a fundamental difference between a farm being "economically sustainable" and being the most profitable use of one's time, energy, and money. As I consistently advise would-be farmers, "If your primary interest is making money, you shouldn't even consider farming as an occupation." I believe "sustainable farming" is one of the most demanding occupations a person can choose. Many other occupations promise greater economic returns with far fewer physical and intellectual challenges. The challenges of small, sustainable farms are made more difficult by government programs that subsidize large, industrial farms, while allowing them to *externalize* their social and

environmental costs. Unless they truly believe that farming is their "calling," I advise would-be farmers to choose other occupations.

For those who feel that their purpose for being is to be a sustainable farmer, I am confident they can find ways to sustain even a small farm economically. First, they must understand that sustainable farming is not just a job; it is a profession. It requires years of education, learning, and experience to farm successfully—like many other professions. It's just not a high-paid profession, much like other "helping" professions, such as teaching, the ministry, or public service. Few people in such professions work from nine to five or leave their jobs at the office.

We shouldn't expect to be compensated economically for everything we do for the good of humanity. The rewards of a purposeful life extend far beyond economic remuneration.

Still, making a decent living is a prerequisite for sustainable farming. Moyer defined "making a living" as weekly earnings equal to a full-time, minimum-wage job, with no unpaid family or volunteer labor and no off-farm income subsidizing the farm. However, these conditions describe a low-paying job rather than a profession. A profession is an inseparable aspect of life—as much a matter of who we are as what we do for a living. We shouldn't expect to be compensated economically for everything we do for the good of humanity. The rewards of a purposeful life extend far beyond economic remuneration.

As Smith and Moyer point out, most farm families—regardless of size or sustainability—do not depend on their farming operations for a significant portion of their incomes. However, few non-farm families in the U.S. are able to support their chosen lifestyles with a single source of income, more than three out of four being dual wage-earner families (Clay, 2005). For many small farmers, their farm simply provides a good place to live and farming a good way to spend their discretionary time. They make their economic living elsewhere. Many small farms show losses year after year—and still continue to be farmed. These farmers obviously have good non-economic reasons for farming. That said, many sustainable farmers do make a good living farming, and others certainly can logically aspire to do likewise. Lynn Byczynski, editor of *Growing for Market* magazine, probably has gleaned as much information about the economics of small-scale farming as anyone in the U.S. She has found a wide range of incomes: "At one end of the scale are growers who pay themselves the same wages as their employees, sometimes as little as minimum wage. At the other end of the scale are people who net [US]$100,000 or more per year—but often that represents the work of both spouses, so the per-person income in even the high-end situations is modest, though certainly adequate" (Byczynski , 2013, para. 5).

With respect to part-time small farms, Byczynski (2013) writes that annual sales from market gardens with less than 3 acres (1.2 hectares) typically range from US$20,000 per acre for mixed vegetables to US$35,000 an acre or more for high-value salad mix, herbs, or cut flowers. Profit margins on such operations consistently run at about 50 to 60 percent of total sales (Byczynski, 2013). Farmers at this scale rarely hire labor, preferring to do the work themselves. This is not a bad part-time occupation—particularly if farming makes the non-farm job bearable. For those who feel "called" to be full-time farmers, even a small farm can be sustained economically. For example, Jean-Martin and Maude-Hélène Fortier, a couple in Quebec, Canada, have been able to make a living farming 1.5 acre (0.6 hectare). Their gross revenue for 2013

For those who feel "called" to be full-time farmers, even a small farm can be sustained economically.

was C$140,000 (all data in this paragraph from Taggart, 2014). Sales from a 140-member community supported agriculture operation (CSA) accounted for 60 percent of gross income; sales at farmers market for 30 percent; and sales to restaurants and grocery stores for 10 percent. Farm expenses included two paid employees. Total expenses for 2013 were C$75,000, leaving a 2013 profit of C$65,000 to compensate the Fortiers. Both work on the farm, but they have two children and claim they have plenty of time for recreation. Currency exchange rates and differences in costs of living between the U.S. and Canada complicate comparisons, but the Fortiers seem well satisfied with their way of life.

I talk with many young farmers who don't want jobs in the corporate world or in industrial agriculture, no matter how much such jobs might pay. They are able to make enough money to continue farming and are happy to be 'rich in other ways.' To them, farming may be challenging, but it is not drudgery; it is an opportunity to live a purposeful, meaningful life. Farmers who have lost this kind of passion for farming, or never had it, probably should choose a different profession. 

References

Byczynski, L. (2013, October 8). Earning potential of market gardening. *Mother Earth News.* http://www.motherearthnews.com/organic-gardening/earning-potential-of-market-gardening-ze0z1310zpit.aspx

Clay, R. A. (2005). Making working families work. *Monitor on Psychology, 36*(11), 54. http://www.apa.org/monitor/dec05/work.aspx

Moyer, J. (2015, February 9). What nobody told me about small farming: I can't make a living. *Salon.* http://www.salon.com/2015/02/10/what_nobody_told_me_about_small_farming_i_cant_make_a_living/

Smith, B. (2014, August 9). Don't let your children grow up to be farmers. *New York Times.* http://mobile.nytimes.com/2014/08/10/opinion/sunday/dont-let-your-children-grow-up-to-be-farmers.html

Taggart, A. (2014, March 29). Jean-Martin Fortier: A model for profitable micro-farming. *Peak Prosperity.* http://www.peakprosperity.com/podcast/85050/jean-martin-fortier-model-profitable-micro-farming

THE ECONOMIC PAMPHLETEER
Published July 17, 2015

Ethnicity and the War on Big Food

Original citation: Ikerd, J. (2015). Ethnicity and the war on big food. *Journal of Agriculture, Food Systems, and Community Development, 5*(4), 7–10. http://dx.doi.org/10.5304/jafscd.2015.054.001

A recent *Fortune* magazine story, "Special Report: The war on big food" begins, "Major packaged-food companies lost [US]$4 billion in market share alone last year, as shoppers swerved to fresh and organic alternatives. Can the supermarket giants win you back?" (Kowitt, 2015, para. 1). The story describes how a wide range of consumer concerns is eroding the market power of the large corporate food companies. The consumer concerns include artificial colors and flavors, pesticides, preservatives, high-fructose corn syrup, growth hormones, antibiotics, gluten, and genetically modified organisms. All of these concerns stem directly or indirect from the industrial paradigm of food production and distribution, including industrial agriculture.

No one has more at stake in the outcome of this war than America's ethnic minorities. Today's industrial food system has failed in its fundamental purpose of providing food security, leaving many Americans without adequate quantities or qualities of foods to support active, healthy lifestyles. In 2012, nearly 15% of all Americas were classified as food insecure (RTI International, 2014, p. 1-6), and more than 20% of American children lived in food-insecure homes (RTI International, 2014, p. 1-7). Ethnic minorities experience significantly higher levels of food insecurity than the U.S. population as a whole. In 2012, 25% of African American and 23% of Hispanic households experienced food insecurity (RTI International, 2014, p. 1-7). One study found that 40% of American Indians lived in food insecure households (RTI International, 2014, p. 1-7). This level of insecurity is far higher today than during the 1960s—the early years of "big food" and "big farms."

Furthermore, the industrial food system is linked to a new kind of food insecurity: unhealthy foods. There is growing evidence that America's diet-related health problems are not limited to unhealthy lifestyles or food choices but begin with a lack of nutrient density in food crops produced on industrial farms (Ikerd, 2013). A recent global report by 500 scientists from 50 countries suggested that "obesity is [now] a bigger health crisis than hunger" (Dellorto, 2012). Obesity rates in the U.S. for 2011–2012 indicated that about 35% of all adults were classified as obese (Trust for America's Health [TFAH], 2014; TFAH & Robert Wood

Johnson Foundation [RWJF], n.d.). The overall childhood obesity rate was just under 17% (TFAH & Robert Wood Johnson Foundation [RWJF], n.d.). Again, ethnic minorities fare far worse than average. Nearly 48% of Blacks and 42% of Latinos were obese, compared with less than 33% of all Whites (TFAH & RWJF, n.d.). For minority women, the differences were even more glaring, with 57% of Black women and 44% of Latino women classified as obese compared with 32% of White women (TFAH & RWJF, n.d.). More than 20% of Black children and 22% of Latino children were obese, compared with 14% of White children (TFAH & RWJF, n.d.). Limited studies show that obesity rates for American Indians are even higher than for other ethnic minorities (RTI International, 2014, p. 1-7).

To create new sustainable farms and food systems, we must understand that the value of gender, age, social status, and ethnic diversity can be realized only in the absence of discrimination.

Ethnic minorities have much to lose in the big food war, but they also have much to contribute to an ultimate victory. The post-industrial paradigm of food production and distribution must be fundamentally different from the industrial paradigm of today. The traditional cultural values of ethnic minorities could be of tremendous value in developing a new paradigm for sustainable food production. Unfortunately, ethnic minorities have been scarce on the front lines of the sustainable food movement. As Duncan Hilchey pointed out in his call for papers for this issue of JAFSCD, "It is really no secret that the food movement has a level of whiteness that, even with the best of intentions, can still be exclusionary" (JAFSCD, 2015, para. 1).

The traditional cultural values of ethnic minorities could be of tremendous value in developing a new paradigm for sustainable food production.

One reason for the scarcity may be that relatively fewer ethnic minorities are farmers, although their numbers are growing. In the 2012 Census of Agriculture, 95.4% of principal operators reported being White (USDA, ERS, 2014a). Hispanic farmers made up the largest percentage of non-White farmers with 3.2%, African Americans made up 1.6%, American Indians or Alaska Natives, 1.8%, and Asians, 0.6% (USDA, ERS, 2014a). Admittedly, about half of all hired farmworkers in the U.S. are Hispanic or Latino, but most are laborers in industrial farming operations (USDA, ERS, 2014b, "Demographic characteristics").

The greatest contributions by ethnic minorities to creating a new food system are likely to be cultural rather than economic. This conclusion and my perspectives regarding cultural diversity reflect seven years of service on the Diversity in Extension task force at the University of Missouri during the 1990s. The task force was ethnically diverse, with equal representation from the faculties of the University of Missouri and Lincoln University—Missouri's historically Black or 1890 Land-Grant University. Over time, we became an effective team by going through the essential processes of forming, storming, norming, and performing. None had more to learn than the "persons of privilege"—including the "token old White man," as I jokingly called myself.

One important lesson was the difference between diversity and discrimination. Cultural diversity refers to cultural differences among groups identifiable by features such as gender, age, social status, and ethnicity. Discrimination occurs when individual members of such groups are indiscriminately treated as if they possess the stereotypical characteristics of their specific group. Individual members of an ethnic minority may or may not possess the cultural differences associated with their particular ethnicity. To create new

sustainable farms and food systems, we must understand that the value of gender, age, social status, and ethnic diversity can be realized only in the absence of discrimination.

The industrial food system, and industrialization in general, fits the stereotypical culture of the White, European male. Specialization, standardization, and control through domination are characteristics associated with "old White men." White boys are taught to be ambitious, assertive, competitive, and aggressive if they expect to succeed. Success is measured in terms of wealth, power, or fame. It should not be surprising that today's business, politics, food industry, and farming are dominated by men who have these stereotypical characteristics. Women and minorities also find it far easier to "succeed" if they learn to think and act like old White men.

Like most other people, I know far less about the cultures of other ethnic groups than I know about my own. However, I know that African American and other traditional tribal cultures tend to place far higher priorities on social relationships than do European cultures. American Indian and other indigenous cultures place far higher values on relationships with nature than do European cultures. Females tend to be conciliatory or nurturing rather than competitive or dominating, and among ethnic minorities, women traditionally provided and continue to provide most of the farm labor. Somehow, we must create a new sustainable food and farming culture that balances the economic efficiency of the dominant culture with the social and ecological integrity of minority cultures. Such values will be essential in winning the war on big food and ensuring that everyone, globally, has enough good food to sustain active, healthy lifestyles—including both current and future generations.

References

Dellorto, D. (2012, December 14). Global report: Obesity bigger health crisis than hunger. CNN News. http://www.cnn.com/2012/12/13/ health/global-burden-report/

Ikerd, J. (2013). Forward. In W. A. Albrecht (Ed.), *Soil Fertility & Human and Animal Health* (pp. xv-xxvi). Austin, Texas: Acres U.S.A. Available at https://sites.google.com/site/albrechtlecture/home/text-of-2011-albrecht-lecture

Journal of Agriculture, Food Systems, and Community Development [JAFSCD]. (2015). *Call for papers: Commentaries on race and ethnicity in food systems work*. Retrieved from http://www.agdevjournal.com/attachments/article/495/JAFSCD-Race-and-Ethnicity-Call-for-Papers-2015.pdf

Kowitt, B. (2015, May 21). Special report: The war on big food. *Fortune*. Retrieved from http://fortune.com/2015/05/21/the-war-on-big-food/

RTI International. (2014). *Current and prospective scope of hunger and food security in America: A review of current research*. Research Triangle Park, North Carolin: RTI International Center for Health and Environmental Modeling. Retrieved from http://www.rti.org/pubs/full_hunger_report_final_07-24-14.pdf

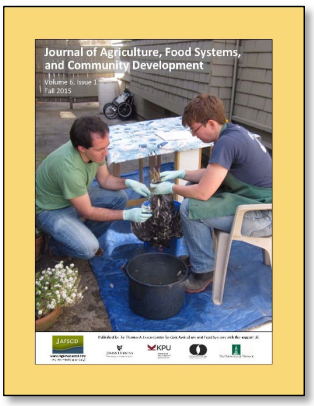
Trust for America's Health [TFAH] & Robert Wood Johnson Foundation [RWJF]. (n.d.) . *Special report: Racial and ethnic disparities in obesity*. Retrieved from the State of Obesity website: http://stateofobesity.org/disparities/

Trust for America's Health. (2014, September). *Reports: The state of obesity: Better policies for a healthier America*. Retrieved from the Trust for America's Health HealthyAmericans.org website: http://healthyamericans.org/report/115/

U.S. Department of Agriculture, Economic Research Service [USDA, ERS]. (2014a). *Socially disadvantaged farmers: Race, Hispanic, origin, and gender*. Retrieved from http://www.ers.usda.gov/topics/farm-economy/beginning-disadvantaged-farmers/socially-disadvantaged-farmers-race,-hispanic-origin,-and-gender.aspx#.VEaDsRax39V

USDA, ERS. (2014b). *Farm labor: Background*. Retrieved from http://www.ers.usda.gov/topics/farm-economy/farm-labor/background.aspx#demographic

THE ECONOMIC PAMPHLETEER
Published October 8, 2015



Toward a *Food Ethic*

Original citation: Ikerd, J. (2015). Toward a *Food Ethic*. *Journal of Agriculture, Food Systems, and Community Development, 6*(1), 3–5. http://dx.doi.org/10.5304/jafscd.2015.061.001

Aldo Leopold's *Land Ethic* is credited with defining a new relationship between people and nature and setting the stage for the modern conservation movement (Aldo Leopold Foundation, n.d.). Most simply stated: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise" (Partridge, 1993, The Land Ethic, para. 10). Again, in the words of Leopold, "The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land" (Aldo Leopold Foundation, n.d., para. 1). I believe we need a similar *Food Ethic* to guide the modern sustainable agriculture movement.

Some may question the need for a new food ethic. There is already an interdisciplinary field of study called "food ethics" that "provides ethical analysis and guidance for human conduct in the production, distribution, preparation and consumption of food" (Peeler, 2015, para. 2). The Catholic Rural Life program has long reminded us that "Eating is a Moral Act," noting that, "We say this simply because food sustains life. But the world of agriculture is extremely complex and there are many moral dimensions to it" (Catholic Rural Life, 2012, para. 1). The idea of a food ethic also is a common sentiment among Native Peoples. Ethical eating certainly is not new idea.

Perhaps somewhere in all that has been written about the intersection of food and ethics there is a statement similar to Leopold's Land Ethic. In response to those who might ask, "Why try and reinvent the wheel?" I suspect the person who invented the wheel was criticized for trying to reinvent the sled. A new Food Ethic is needed to guide the sustainable agriculture movement in the way Leopold's Land Ethic has guided the conservation movement.

In the style of Leopold, I propose a Food Ethic that says: *Food is good when it nourishes the life and health of the eater, honors the sacrifice of life embodied in the eaten, and respects the purpose and inherent worth of all beings.* Food is bad when it does otherwise. I believe the ultimate success of the sustainability movement depends on our willingness to begin labeling intentional acts as either "good" or "bad," as Leopold labeled acts as "right" or "wrong" in his land ethic.

"Good food" nourishes the life and health of

those who eat it. Again in the style of Leopold, I would put forth, *That food is life's energy, is a basic concept of sustainability, but that food is to be respected, honored, and loved is an extension of ethics.* Since life is sacred, food is sacred; but good food is about more than just sustaining life. If food sustains life without promoting good health and quality of life, it is not "good food."

A food ethic must also respect, honor, and love the eaten as well as the eater. Eating inevitably involves the act of killing or at least eating something that was once living or could have sustained the life of some other being. All biological beings, including humans, get their life's energy from other biological beings, typically from the dead carcasses of other once-living beings. Carnivores, vegetarian, and vegans all participate in acts of killing.

We are more sensitive to the sacrifice of life and suffering by the eaten when we kill and eat things that are more like us—particularly sentient animals. Thus the phrase "eating is murder" is more commonly associated with eating meat. However, most vegetables were alive when they were "harvested." Most fruits, grains, and seeds were embryos with the potential for new life until they were eaten. The milk of a cow could have nourished a calf. Anything we eat deprives some other living thing of a potential source of food and thus life.

The deprivation of life is an essential aspect of sustaining life. A food ethic must accept and respect this fact by honoring the sacrifice of life embodied in the eaten. This sacrifice includes not only the life represented by the food itself, but the sacrifice of everyone and every living thing involved in the process of producing the food. The sacrifice includes the exploitation or mistreatment of farmers and food industry workers, the degradation and destruction of natural ecosystems, and the deprivation of future generations of their basic human right to good food. A food ethic must respect and honor the goodness of all life—it must reflect a love of life.

> **I propose a *Food Ethic* that says:**
> ***Food is good when it nourishes the life and health of the eater, honors the sacrifice of life embodied in the eaten, and respects the purpose and inherent worth of all beings.***

Following once more from Leopold, *A food ethic, then, reflects the existence of an integral consciousness, and this in turn inspires the conviction of individuals to treat eating as an ethical act.* A food ethic ultimately connects the act of eating with the health and well-being of all other living and nonliving aspects of the integral, universal whole. It goes beyond an ecological consciousness to include the social, economic, and spiritual dimension of the universal whole.

The food ethic acknowledges our common sense of the existence of purpose in life. Without purpose there is no way to distinguish *right* from *wrong* in our relationship with the land or *good* from *bad* in our relationship with food. Ethics presume purpose. The new food ethic accepts that life, including human life, has some purpose to fulfill within the integral whole of reality. Obviously, the purpose for all living things includes the purpose of providing food for other living things. I suspect dead human bodies were meant to provide food for decomposers rather than dry out in sealed vaults or be cremated.

> **The new food ethic accepts that life, including human life, has some purpose to fulfill within the integral whole of reality.**

Since there is no possible means of determining that some beings are of greater or lesser inherent worth than others, the new food ethic accepts that all beings are of equal inherent worth. The purpose of no individual being, human or otherwise, is no more or less important than any other being in contributing to

the purpose of the universal whole. Thus, ethical eating is not a matter of avoiding foods that involve the sacrifice of life but instead of honoring the purpose and inherent worth of the eaten as well as the eater.

Both unnecessary cruelty to food animals and a failure to respect the life of vegetative foods violate the food ethic. Killing or harvesting beings whose purpose is to provide food for other beings, including humans, does not. The key to ethical eating is to choose foods that allow every entity involved in the process—living and nonliving—to fulfill its unique purposes within the universal whole. Some part of the inherent worth of each living being is its ability to provide food for other living beings. When my purpose for living has been fulfilled, I personally would prefer to enhance my remaining worth by being *composted*.

References

Aldo Leopold Foundation. (n.d.). *The Leopold Legacy: The Land Ethic.* Retrieved July 2015 from http://www.aldoleopold.org/AldoLeopold/landethic.shtml

Catholic Rural Life. (2012). *Food and faith: Why eating is a moral act* [Online introduction to spring 2012 issue]. Retrieved from https://catholicrurallife.org/magazine/food-and-faith-why-eating-is-a-moral-act-spring-2012/

Partridge, E. (1993). The philosophical foundations of Aldo Leopold's "Land Ethic." *The Online Gadfly.* Retrieved from http://gadfly.igc.org/papers/leopold.htm

Peeler, R. (2015). *What is food ethics?* The Rock Ethics Institute, Penn State University. Retrieved from http://rockethics.psu.edu/initiatives/bioethics/programs/food-ethics/what-is-food-ethics

THE ECONOMIC PAMPHLETEER
Published January 14, 2016

Rethinking the Value of Work

Original citation: Ikerd, J. (2016). Rethinking the value of work. *Journal of Agriculture, Food Systems, and Community Development, 6*(2), 5–7. http://dx.doi.org/10.5304/jafscd.2016.062.003

"How can it be that more than a century after muckrakers exposed the deplorable conditions of workers in the food system, that harassment of workers, rapes in the fields, squalid living conditions, pesticide showers, hazardous working conditions, and slave wages continue be the norm?" (Kolodinsky, 2014, p. 198). In reviewing the documentary film *Food Chain,* Jane Kolodinsky provides this fitting description of the inevitable consequences of the commodification of labor in an unrestrained market economy.

The deplorable working conditions in the food industry have not been corrected because such conditions are inherent in the industrial system of food production. More effective labor unions and ethical choices by consumers might relieve some of the suffering—at least temporarily. However, the well-being of workers in the food industry and elsewhere will not be significantly improved until we rethink the value of work and restrain our economic system accordingly.

The most basic function of a free-market economy is to allocate land, labor, and capital among alternative uses so as to maximize consumer utility or satisfaction. Anything that needlessly increases the cost of food to consumers inevitably decreases economic efficiency and leads to decreased consumer satisfaction. If food retailers agree to pay a penny a pound more for tomatoes to improve the pay or working conditions for farm workers, for example, they expect to pass the cost increase on to consumers—and will likely add another penny for profits. This will raise tomato prices for consumers, including those who don't know or care about the plight of farmworkers, thus decreasing overall consumer satisfaction.

Furthermore, the willingness of some consumers to pay more for the same tomatoes is "economically irrational," since presumably there will be no tangible differences between tomatoes produced under favorable and unfavorable working conditions. This leaves the fate of farmworkers to be determined by economically irrational consumers who can afford to pay more for tomatoes. "Free choice of employment," "just and favorable conditions of work," and "remuneration ensuring…an existence worthy of human

dignity" (United Nations, 1948, Article 23) are basic human rights, according to the United Nations Declaration of Human Rights—which the U.S. refuses to endorse. Rights are not privileges to be granted at the discretion of employers or wealthy consumers. Rights depend on social justice—not economics. Economies afford no more respect for the "rights" of workers than for the "rights" of land or capital. They are all just factors of production.

Furthermore, market economies function to meet our needs as consumers, not as workers or as members of society. Whatever economic value we receive from our work is realized only by consuming or using what we buy with the money we earn from working. Whatever we sacrifice as workers must be compensated by the benefits we receive as buyers or consumers. Unfortunately, those who benefit most as consumers are rarely the same people who sacrifice most as workers. In addition, the lack of economic completion in today's market economy allows some to extract profits from the system rather than reward workers for their efficiency or pass the savings on to consumers. Publicly traded corporations, being *rational* economic entities, have no incentive to do anything for the benefit of workers or consumers unless it adds to their economic bottom line.

The food industry clearly has an economic incentive to minimize labor costs, regardless of who benefits and who pays. According to the U.S. Department of Agriculture (USDA), "wages, salaries, and contract labor expenses represent roughly 17 percent of total variable farm-level costs and as much as 40 percent of costs in labor-intensive crops such as fruit, vegetables, and nursery products" (USDA, ERS, n.d., para. 1). The nonfarm sectors of the food system are even more labor-intensive, resulting in labor costs accounting for roughly 50 cents of each food dollar of U.S. consumers. So, it is naïve to expect industrial farmers or food corporations to gratuitously increase the compensation of farm or food industry workers, or to willingly grant workers their basic human rights.

The fundamental problem is a failure of society to recognize the full value of work. In capitalist economics, work is considered to be inherently unpleasant or distasteful. The money gained from working is the only reward for giving up the alternative of enjoying leisure. Work would never be willingly undertaken without some offsetting economic compensation. In economic thinking, there is no recognition of any positive value of work apart from the economic value derived from the consumer market value of whatever is produced.

While people should expect to work in order to meet their basic needs, even if the economic remuneration is meager, work can also produce social and cultural value. Yet economics gives no consideration to the fact that work helps give purpose and meaning to life. The sense of dignity arising from meaningful work can translate into a sense of self-worth that goes far beyond survival or subsistence. The admiration and respect granted by fellow workers, employers, or customers for a job well done may far outweigh any additional economic compensation. Many workers actually enjoy their work. Many more undoubtedly would do so if they were afforded their basic human rights to free choice of employment, just and favorable work conditions, and remunerations sufficient to ensure an existence worthy of human dignity.

It is naïve to expect industrial farmers or food corporations to gratuitously increase the compensation of farm or food industry workers, or to willingly grant workers their basic human rights.

To break the bonds of economic slavery, we must value humans as multidimensional beings, not biological machines. We are social beings capable of receiving tremendous *personal* value from positive human relationships—even relationships that produce nothing of economic value. We are spiritual beings capable of receiving tremendous *ethical* value from a life of purpose—including our life of work. Work is not a burden but a privilege,

at least when performed under conditions that respect our basic human rights as workers.

We are not just consumers; we are also thoughtful, caring workers and responsible members of society. Our preferences as consumers cannot be allowed to take priority over our rights as workers and global citizens. All workers, not just farmworkers and food workers, will continue to work under conditions of economic slavery until our market economy is forced by civil society to recognize and respect the full economic, social, and cultural value of work.

References

Kolodinsky, J. (2014). More than one meaning of "chain" in *Food Chains,* a documentary film. *Journal of Agriculture, Food Systems, and Community Development, 5*(1), 197–198. http://dx.doi.org/10.5304/jafscd.2014.051.011

United Nations. (1948). *Universal Declaration of Human Rights, Article 23*. Retrieved from http://www.un.org/en/documents/udhr/

U.S. Department of Agriculture, Economic Research Service [USDA, ERS]. (n.d.). *Farm labor*. Retrieved Oct. 30, 2014, from http://www.ers.usda.gov/topics/farm-economy/farm-labor.aspx

THE ECONOMIC PAMPHLETEER
Published May 14, 2016

Toward an *Ethic of Sustainability*

Original citation: Ikerd, J. (2016). Toward an *Ethic of Sustainability. Journal of Agriculture, Food Systems, and Community Development, 6*(3), 3–5. http://dx.doi.org/10.5304/jafscd.2016.063.001

Sustainable farming is ultimately an ethical commitment. As I have written in a previous column, "There are lots of other occupations where people can make more money with far fewer physical and intellectual challenges.…Unless they truly believe that farming is their 'calling,' I advise would-be farmers to choose other occupations" (Ikerd, 2015a, p. 10). A purpose or calling determines what a person should and should not do with their lives and thus is a matter of ethics.

In a previous column, I proposed a *Food Ethic* as a guide for purposeful eating (Ikerd, 2015b). I think we also need an *Ethic of Sustainability* as a guide for purposeful living, in farming or any other way of life. I propose: *A thing is right when it tends to enhance the quality and integrity of both human and nonhuman life on earth by honoring the unique responsibilities and rewards of humans as members and caretakers of the earth's integral community. A thing is wrong when it tends otherwise.*

First, the ethic goes beyond defining sustainable practices or even principles by defining some things we might do as "right" and others as "wrong." Questions of right and wrong cannot be answered using currently accepted scientific methods. These are matters of belief or faith. Thus scientists tend to ignore them, and consequently so do most advocates of sustainability. This has allowed the concept of sustainability to be trivialized and coopted by corporations and marginalized by government agencies.

As Pope Francis observes in his encyclical letter, Laudato Si', *for Care of our Common Home,* "we can note the rise of a false or superficial ecology which bolsters complacency and a cheerful recklessness. Such evasiveness serves as a license to carrying on with our present lifestyles and models of production and consumption" (Francis I, 2015, para. 59). In my opinion, "superficial sustainability" today is "bolstering complacency and cheerful recklessness" in American agriculture and is being used as a "license" for continuing unsustainable farming.

Second, the *Ethic of Sustainability* reflects an "integral worldview." All life on earth, including human life, is integrally interconnected and interdependent, and all living things are integrally connected with all nonliving things on earth (for a deeper discussion of worldview and sustainability, see Ikerd, Gamble, and Cox, 2015). A person's

worldview, integral or otherwise, depends on his or her perception of "how the world works" and of our individual and collective roles as humans within it. Since our worldviews determine what we accept as fact or truth, an "integral worldview" is a spiritual, metaphysical, or philosophical perception of reality.

An integral worldview is not new to sustainable farming. Rudolf Steiner, the father of biodynamic farming, said, "Central to bio-dynamics is the concept that a farm is healthy only as much as it becomes an organism in itself—an individualized, diverse ecosystem guided by the farmer, standing in living interaction with the larger ecological, social, economic, and spiritual realities of which it is part" (Steiner, 1924/1993).

Third, the *Ethic of Sustainability* focuses on the quality and integrity of "life," meaning the whole of life on earth. Living things are the only means we have of acquiring the energy necessary to sustaining human life on earth. Our food, our clothes, our houses, and our cars all require energy to make and energy to use. Everything of any use to us, including everything of economic value, ultimately comes from the physical elements of the earth: air, water, soil, minerals. However, it's the earth's *energy* that makes the other elements of nature useful to humans. Sustainability ultimately depends on sustaining the *usefulness of energy*.

The first law of thermodynamics states that energy can neither be created nor destroyed. However, the second law, the law of entropy, states that whenever energy is used, or reused, to do anything useful, some of its usefulness is lost. Only living things, primarily plants on land and plankton in oceans, are capable of capturing, organizing, concentrating, and storing new solar energy to offset the inevitable tendency of energy toward uselessness. We humans can sequester useful energy, using windmills, falling water, and photovoltaic cells. However, we are inherently reliant on the biological energy collectors for our life's energy. So, the sustainability of human life on earth is inherently dependent on the quality, integrity, and thus the *usefulness* of the living world to offset the inevitable tendency of the nonliving world toward entropy or uselessness.

The emphasis of the ethic on life is also important because we *can't see* the loss of usefulness of energy due to entropy. Farmers can't see the loss of useful energy on their farms, but they can see the diminished quality of biological life in their soils, their crops and livestock, and the lives of the people who farm and live in their rural communities. Any approach to farming that fails to enhance the quality and integrity not only of human life but of all life on earth is not only unsustainable, it is morally and ethically wrong.

The sustainability of human life on earth is inherently dependent on the quality, integrity, and thus the *usefulness* of the living world to offset the inevitable tendency of the nonliving world toward entropy or uselessness.

Finally, the *Ethic of Sustainability* acknowledges that our lives have *purpose*. Without purpose, there can be no responsibility. Concerns for sustainability arise from our uniquely human responsibilities as members and caretakers of the earth's communities. Nowhere is this responsibility clearer than in farming. As Pope Francis states, "The biblical texts are to be read in their context… recognizing that they tell us to 'till and keep' the garden of the world (cf. *Gen* 2:15). 'Tilling' refers to cultivating, ploughing or working, while 'keeping' means caring, protecting, overseeing and preserving...Each community can take from the bounty of the earth whatever it needs for subsistence, but it also has the duty to protect the earth and to ensure its fruitfulness for coming generations" (Francis I, 2015, para. 67).

This responsibility was clearly understood by the pioneers of sustainable agriculture. J. I. Rodale wrote, "The *organiculturist* farmer must realize that in him is placed a sacred trust, the task of producing food that will impart health to the people who consume it. As a patriotic duty he assumes an

obligation to preserve the fertility of the soil, a precious heritage that he must pass on, undefiled and even enriched, to subsequent generations" (Rodale, 1948, Chapter 8, para. 15). Sir Albert Howard began his classic book, *An Agricultural Testament,* with the assertion, "The maintenance of the fertility of the soil is the first condition of any permanent system of agriculture" (Howard, 1940, Introduction, para. 1)—which is also the foundation for any permanent society.

So sustainable farming is not just an occupation; it is a calling to a life of purpose. Those who are called have an awesome responsibility, but also an opportunity for service to humanity with equally awesome rewards. Purpose gives meaning and quality to life and is the key to true human well-being and happiness. Most of us are called to be something other than farmers, but we should all be grateful and supportive of those who respond to an ethical calling to be farmers. 

References

Francis I. (2015, May 24). Laudato Si' *of the Holy Father Francis on care for our common home* [Encyclical letter]. Retrieved from The Holy See website: http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html

Howard, A. (1940). *An agricultural testament* [Online version]. Oxford, UK: Oxford University Press. Retrieved from the Small Farms Library: http://journeytoforever.org/farm_library.html #howard

Ikerd, J. (2015a). Can small farms be sustained economically? *Journal of Agriculture, Food Systems, and Community Development, 5*(3), 9–11. http://dx.doi.org/10.5304/jafscd.2015.053.001

Ikerd, J. (2015b). Toward a *Food Ethic. Journal of Agriculture, Food Systems, and Community Development, 6*(1), 3–5. http://dx.doi.org/10.5304/jafscd.2015.061.001

Ikerd, J., Gamble, L., & Cox, T. (2015). *Deep sustainability; The essentials.* Retrieved from https://sites.google.com/site/sustainabilitydeep/

Rodale, J. I. (1948). *The organic front* [Online version]. Emmaus, Pennsylvania: Rodale Press. Retrieved from the Soil and Health Library website: https://soilandhealth.org/copyrighted-book/the-organic-front/

Steiner, R. (Author), & Gardner, M. (Ed.). (1924/1993). *Spiritual foundations for the renewal of agriculture: A course of lectures held at Koberwitz, Silesia, June 7 to 16, 1924.* C. E. Creeger & M. Gardner (Trans.). Kimberton, Pennsylvania: Bio-Dynamic Farming and Gardening Association.

THE ECONOMIC PAMPHLETEER
Published August 4, 2016

How Do We Ensure Good Food for All?

Original citation: Ikerd, J. (2016). How do we ensure good food for all? *Journal of Agriculture, Food Systems, and Community Development, 6*(4), 3–5. http://dx.doi.org/10.5304/jafscd.2016.064.001

How do we provide good food for all 323 million Americans? Differing answers to this question continue to distract, if not misdirect, the sustainable food movement. Some argue that organic, local, and other so-called good foods must accommodate the current industrial system of food processing and retailing. They point to the fact that organic food sales of nearly US$40 billion per year (Organic Trade Association, 2016) are still less than 5% of total retail food sales. In addition, mainstream supermarkets and large specialty markets, such as Whole Foods and Trader Joe's, account for more than 90% of organic sales (Porterfield, 2015). Large corporate food processors also own and control production for most of the major organic food brands (The Cornucopia Project, n.d.). So, about 99% of foods still move through the industrial food system, even after accounting for local food sales of an estimated $12 billion per year (Vilsack, 2015). To accommodate the 99%, some good food advocates urge farmers to find ways to accommodate the industrial food system.

Critics of the industrial food system tend to have a different concept of good food. They share Slow Food's stated vision of "a world in which all people can access and enjoy food that is good for them, good for those who grow it and good for the planet" (Slow Food, n.d., para. 1). They agree that good food must be safe, nutritious, and flavorful. However, a system that produces authentically good food must also protect the integrity of natural ecosystems, ensure access to enough good food for all, and fairly reward farmers and farm workers for their contributions and commitments. A good food system is a sustainable food system. Admittedly, Slow Food members and other good food advocates have yet to agree on the means for fulfilling their missions of food access and fairness (Birdsall, 2011). However, a corporately controlled, industrial food system is fundamentally incapable of sustaining the provision of "good, clean, fair foods."

Since organic foods are produced without synthetic pesticides, they obviously are safer than are conventional foods—even if they are produced, processed, and sold by large corporations. Organic foods may also be more nutritious and flavorful, particularly if they are grown on healthy, organic soils. Unfortunately, the publicly traded

corporations that control the industrial food system are purely economic entities. There are no economic incentives to ensure that everyone has access to good, healthful foods, regardless of their ability to pay the price of organic foods. There are no economic incentives to ensure that workers on organic farms are paid decent wages or have tolerable working and living conditions. There are no economic incentives to ensure that prices paid to organic farmers are high enough to allow them to be stewards of nature—soil, air, and water—for the benefit of future as well as present generations.

Critics of industrial organics are accused of "allowing the excellent to become the enemy of the good." This is a legitimate concern. However, apologists for industrial organics run a similar risk of "allowing the necessary to become the enemy of the sufficient." Making good food accessible to more people is necessary for sustainability, and marketing organic foods through mainstream markets may be a necessary place to start that process. However, publicly traded corporations are obligated to serve the "common interest" of their shareholders, and maximizing economic returns on investments is the only common interest of those who own today's large food corporations. Economic incentives alone will never be sufficient to ensure enough good food for all of either current or future generations.

Responding to changing economic incentives is another necessary step toward a sustainable food system. Unlike corporations, most "real people" don't make purely economic decisions. We pay premiums for some things and avoid buying others, reflecting our social and ethical values. As more consumers express preferences for good, clean, and fair food by willingly paying premium prices, new economic opportunities will be created. However, relying solely on market incentives would allow the good food movement to be defined and guided by economics rather than ethics: "one dollar, one vote," rather than "one person, one vote." Some people in America have a lot more dollars than the most of rest of us. Questions regarding our relationships with nature and each other, including what constitutes "clean and fair," are questions of ethics, not economics. Market incentives will never be sufficient to ensure the social and ethical integrity of food production and distribution.

Relying solely on market incentives would allow the good food movement to be defined and guided by economics rather than ethics.

Advocates of accommodation tend to accept the industrial structure of today's food system as a given future condition as well. They fail to recognize that economies are continually evolving; that industrial agriculture, supermarkets, and fast foods only emerged in the mid-1900s. Signs of a new post-industrial era in retailing are already becoming apparent. For example, in July 2015 the stock market value of Amazon.com exceeded the total stock value of Walmart (Tharakan & Saito, 2015). Virtually all major retailers, including food retailers, are venturing into internet marketing and home delivery—neither of which lends an advantage to industrial organizations. Supermarkets may have been logical places to introduce organic foods to more consumers, but they seem unlikely to play a significant role in the future of the good food movement.

Economic incentives alone will never be sufficient to ensure enough good food for all of either current or future generations.

The new post-industrial sustainable food system need not be limited to face-to-face marketing. The National Good Food Network lists more than 300 "food hubs" (National Good Food Network, n.d.), which are cooperatives or alliances that allow farmers to aggregate individual production to serve markets larger than they can serve alone. Admittedly, if

farmers compromise their ecological and social integrity in the process of scaling up, they will be little different from today's industrial farmers. However, the key to sustaining relationships of integrity is a sense of personal connectedness and commitment between farmers and their customers, not necessarily based on geographic proximity. Those who share a commitment to the ethical and social values of sustainability will have increasing opportunities to completely bypass the industrial food system.

While community supported agriculture (CSA) and food-buying club memberships in the U.S. typically range in the hundreds, Riverford Organics (n.d.) in the UK delivers around 47,000 boxes of foods a week from its regional farms to local customers. Their products include not only a diversity of vegetables and fruits, but also meat, milk, eggs, and a variety of specialty products. Urban home-delivery programs, such as Blue Apron (n.d.) and HelloFresh (n.d.)—each of which delivers 8 to 10 million meals a month—allow sustainable farmers to connect with hundreds of thousands of customers in large cities. Innovations such as these have the potential to replace the current industrial food system, from farm to fork, and to restore the sense of personal connectedness and commitment essential to ensure good food for all. Replacing the impersonal industrial food system with a personally connected food network at least creates the possibility for fundamental and lasting change.

References

Birdsall, J. (2011, December 14). *Cheap drama at Slow Food*. Retrieved from the Chowhound website: http://www.chowhound.com/food-news/101027/slow-food-usa/

Blue Apron. (n.d.). *Discover a better way to cook*. Retrieved June 10, 2016, from https://www.blueapron.com/

Cornucopia Institute, The. (n.d.). *Who owns organic*. Retrieved June 10, 2016, from http://www.cornucopia.org/who-owns-organic/

HelloFresh. (n.d.). *More than food*. Retrieved June 10, 2016, from https://www.hellofresh.com/tasty/

National Good Food Network. (n.d.). US food hubs - Full list. Retrieved from http://www.ngfn.org/resources/food-hubs#section-13

Organic Trade Association. (2016). U*.S. organic sales post new record of $43.3 billion in 2015* [Press release]. Retrieved from https://www.ota.com/news/press-releases/19031

Porterfield, A. (2015, July 15). *Farm to boardroom: US organic industry dominated by mega corporations*. Retrieved from the Genetic Literacy Project website: https://www.geneticliteracyproject.org/2015/07/15/farm-to-boardroom-us-organic-industry-dominated-by-mega-corporations/

Riverford Organics. (n.d.). *Organic veg boxes from our farm to your table*. Retrieved June 10, 2016, from http://www.riverford.co.uk/

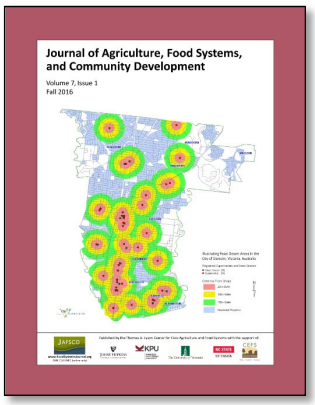
Slow Food. (n.d.). *Our philosophy*. Retrieved June 10, 2016, from http://www.slowfood.com/about-us/our-philosophy/

Tharakan, A. G., & Saito, M. (2015, July 23). *Amazon shares soar on surprise profit, market value above Wal Mart's*. Retrieved from the Reuters website: http://www.reuters.com/article/us-amazon-com-results-idUSKCN0PX2HX20150723

Vilsack, T. (2015, July 1). *Tapping into the economic potential of local food through local foods, local places* [Blog post]. Retrieved from http://blogs.usda.gov/2015/07/01/tapping-into-the-economic-potential-of-local-food-through-local-foods-local-places/

THE ECONOMIC PAMPHLETEER
Published November 1, 2016

Enough Good Food for All: A Proposal



Original citation: Ikerd, J. (2016). Enough good food for all: A proposal. *Journal of Agriculture, Food Systems, and Community Development, 7*(1), 3–6. http://dx.doi.org/10.5304/jafscd.2016.071.001

Note: This column is a follow-up to my previous Economic Pamphleteer column, "How Do We Ensure Good Food for All?," which appeared in the summer 2016 issue.

How do we provide good food for all 323 million Americans? I began my previous column with this question (Ikerd, 2016). In that column, I defined good food as safe, nutritious, and flavorful foods, produced by means that protect natural ecosystems, fairly reward farmers and farmworkers, and ensure that all have enough food to support healthy, active lifestyles. I explained why our current industrial food system is fundamentally incapable of providing good food for everyone. I concluded that replacing today's impersonal industrial food system with a personally connected food network would create at least the possibility of enough good food for all. In this column, I propose a logical means of capitalizing on this possibility.

First, we need to understand that hunger today is avoidable or discretionary, rather than unavoidable or inevitable (except under circumstances of war, insurrection, or natural disaster). We produce more than enough food in the United States and globally to provide everyone with enough food. We could also provide more than enough good food, if we reduced food waste, stopped using food for fuel, and fed less grain to livestock. A recent meta-study by the International Panel of Experts on Sustainable Food Systems, entitled *From Uniformity to Diversity,* described the scientific evidence supporting a global shift from industrial to sustainable agriculture as "overwhelming" (International Panel of Experts on Sustainable Food Systems, 2016, p. 6).

Second, elimination of hunger cannot be left to the indifference of markets, the vagaries of charity, or impersonal government programs. Markets provide food for those who are able to earn enough money to pay market prices, which inevitably excludes many who need food. Charity is discretionary and often discriminatory. Government programs dating back to the English Poor Laws of 1601 have failed to solve problems of persistent hunger. Hunger is a reflection of systemic problems imbedded deeply within our food system, economy, and society. Elimination of hunger will require a comprehensive approach that addresses the logistical, economic, demographic,

social, and cultural challenges of hunger.

Admittedly, the challenge is formidable—but it is not unsurmountable. I am proposing a specific approach to addressing hunger in hopes of stimulating a dialogue as to how best meet the challenge. To solve large, systemic problems such as hunger, we have to find points of leverage where small, doable actions can lead to large, seemingly impossible effects—like the small "trim tab" that turns the rudder of a ship, which causes the whole ship to change direction.

We will not eliminate hunger until we accept the right to food as a basic human right. Accepting food as a basic right at the national level might seem impossible. However, progressive local communities might well accept this responsibility, much as some communities have accepted the challenge of global climate change. Discretionary hunger historically emerged from the depersonalization of local economies, when buying and selling replaced personal relationships. Thus hunger is a reflection of a lack of caring. The best hope for reestablishing the sense of personal connectedness essential to eliminate hunger is the reemergence of caring communities.

Elimination of hunger cannot be left to the indifference of markets, the vagaries of charity, or impersonal government programs.

One means of meeting our collective responsibility to ensure good food for all would be through a "community food utility," or CFU. Public utilities are businesses established to provide specific public services. They are commonly used to provide water, sewer, electricity, natural gas, communication systems, and other essential services. Public utilities are granted special privileges and are subject to special governmental regulation. While our existing system of utilities ensure universal access to essential services, they do not ensure that everyone can afford enough of those services to meet their basic needs. As I envision them, CFUs would not only ensure universal access to food, but also would ensure that everyone has enough good food to meet their basic needs—as an essential public service.

The best hope for reestablishing the sense of personal connectedness essential to eliminate hunger is the reemergence of caring communities.

The CFU could fill in the persistent gaps left by markets, charities, and impersonal government programs to ensure that every household in a community could afford enough good food. In 2014, U.S. households at middle income levels spent approximately 15% of their disposable incomes on food (U.S. Department of Agriculture, Economic Research Service [USDA ERS], n.d.-a). One approach to ensuring affordability would be to ensure that every household in the community has the equivalent of 15% of the community's median household income to spend for food. Those households falling below the income threshold could be provided with opportunities to make up their shortfall in income needed for food by contributing local public services.

Public services of both economic and non-economic values would be accepted. CFU payments for local public services would be based on hours of service rather than economic value, giving everyone an equal opportunity. An hour of approved childcare for a mother who needs but can't afford childcare would be valued the same as an hour of landscaping of the courthouse lawn for a county that could have afforded to pay it. An hour of approved entertainment on the town square by an unemployed musician would be valued the same as an hour of plumbing by an unemployed plumber at a local government building.

CFU payments for services would be made in Community Food Dollars (CF$s), which could be used only to buy food provided by the CFU.

Priority in procuring food for the CFU would be given to local farmers willing to meet locally determined standards that ensure safe, nutritious, appetizing foods produced by sustainable means. The CFU would serve as a "food grid" by procuring foods from nonlocal producers when necessary to fill in gaps in local production. Priority for nonlocal procurement would be given to regional suppliers who are willing and able to meet local "good food" standards. Local farmers and providers would be ensured prices sufficient to cover their costs of production plus a reasonable profit, as is the case with existing public utilities. Prices would be negotiated between the CFU and farmer, much as public utility regulators now negotiate rates with public utilities.

Priority in procuring food for the CFU would be given to local farmers willing to meet locally determined standards that ensure safe, nutritious, appetizing foods produced by sustainable means.

Nutrition education would be integrated into all CFU programs to help participants learn to select nutritiously balanced diets for their families and to prepare appetizing meals from the raw and minimally processed foods provided by the CFU. More than 80% of the cost of foods purchased overall (U.S. Department of Agriculture, Economic Research Service [USDA ERS], n.d.), and nearly 90% of the cost of restaurant meals (USDA ERS, 2016), are associated with the costs of processing, packaging, transportation, energy, taxes, insurance, and services provided by food retailers. By spending CF$s on raw and minimally processed local foods provided by the CFU, even the lowest-income consumers would be able to afford more than enough good food.

CFU foods would be made available to participants by means that ensure physical access to food for everyone and minimize food wasted due to a lack of adequate refrigeration or food storage. The needs of children and the elderly and disabled would be given special consideration. The CFU would coordinate its functions with local charities and government programs, such as food stamps (SNAP) and school lunches to avoid duplication. The CFU might operate a "community food market" where those without special needs could go to buy CFU food using CF$s. For those lacking ready access to transportation or refrigeration, delivery options would include periodic deliveries of individually selected CSA-like "food boxes." Home delivery of foods for specific meals would be provided for those who could not be accommodated with other options. Meal preparation guidelines and basic refrigeration and storage would be provided to accommodate the various delivery options and specific needs of participants.

As local production expands beyond levels needed to address hunger, the CFU could offer good food to the general community at prices covering its full costs, with surplus revenue retained by the CFU. However, the CFU would require continuing commitments of local tax dollars. The key difference between the CFU and existing government programs would be that government officials in caring communities feel a personal sense of connection with their community, and community members feel a personal sense of responsibility for each other. Local government officials could evaluate the effectiveness of their programs with respect to meeting specific needs of preferences of people in their communities—people who they know and care about. They would not be restrained by national or statewide programs that don't adequately address the specific needs of their communities. After all, rights and responsibilities are taken more seriously among those who know and care about each other personally.

Rights and responsibilities are taken more seriously among those who know and care about each other personally.

The CFU would operate as efficiently as possible, but would not compromise its commitment to ensuring that all in the community have enough good food to meet their basic needs. As trim tab communities eliminate hunger, the rudder of public policy will begin to shift, and the ship of state will turn toward global food sovereignty. Eventually there will be good food for all, not just the hungry. However, hunger cannot be eliminated as long as the quest for economic efficiency deprives the poor of their basic human right to enough good food.

I have put up a Google Site with a fairly detailed outline of my overall proposal at http://sites.google.com/site/communityfoodutility. It's a working document, not ready for publication yet. Comments are welcome; instructions are provided at the bottom of the Google Site page. 

References

Ikerd, J. (2016). How do we ensure good food for all? *Journal of Agriculture, Food Systems, and Community Development, 6*(4), 3–5. http://dx.doi.org/10.5304/jafscd.2016.064.001

International Panel of Experts on Sustainable Food Systems [IPES-Food]. (2016). *From uniformity to diversity: A paradigm shift from industrial agriculture to diversified agroecological systems.* Retrieved from http://www.ipes-food.org/images/Reports/UniformityToDiversity_FullReport.pdf

U.S. Department of Agriculture, Economic Research Service [USDA ERS]. (n.d.). *Food Dollar Series: Documentation.* Retrieved Oct. 31, 2016, from http://www.ers.usda.gov/data-products/food-dollar-series/documentation/

USDA ERS. (2016, April 12). *Ag and food statistics: Charting the essentials: Food prices and spending: Nearly a third of the U.S. food dollar is spent on eating out services* [Chart]. Retrieved from http://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/food-prices-and-spending. aspx

THE ECONOMIC PAMPHLETEER
Published February 24, 2017

Sustainability: Part of the New Women's Movement

Original citation: Ikerd, J. (2017). Sustainability: Part of the new women's movement. *Journal of Agriculture, Food Systems, and Community Development.* Advance online publication. http://dx.doi.org/10.5304/jafscd.2017.072.004

At recent local food conference in Toronto, Canada, I opened my presentation by commenting on the impressively large numbers of women, young people, and racial and ethnic minorities in the audience. I suggested that the stereotypical *old, white men* were not going to give up control of the food system without a fight, so we need to be prepared to take it away from them. When I sat down, a female fellow panel member remarked to me that the women's movement is very complementary to the sustainable food movement. I replied, almost without thinking, "The sustainable food movement *is* a women's movement." I perhaps should have called it a *women-led* movement, for the sake of accuracy.

Even in the early 1990s, I had observed that leadership positions in sustainable agriculture educational programs were dominated by women. At an educational event hosted by a Native American tribe in Idaho, male and female participants were asked to sit at separate long tables for the evening meal—as was traditional for the tribe. We were to fill the chairs from the front toward the back of the room. I quickly noticed that the women's table was filled to a length more than twice as long as the men's table.

Many of the sustainability program leaders in universities, government agencies, and nonprofit organizations are and have been female. Sustainable-minded farmers may still be mostly male, but the numbers of women farmers are growing. Young women farmers are providing leadership for national young farmer organizations such as the National Young Farmers Coalition (National Young Farmers Coalition, n.d.) and The Greenhorns (The Greenhorns, n.d.). The 5th Annual Women in Sustainable Agriculture Conference brought more than 300 women farmers, ranchers, and educators together in Portland, Oregon, in 2016 (Adams, 2016). At events I attend in the U.S., Canada, and elsewhere, the leadership of the sustainable/ local food movement tends to be dominated by women.

I believe many women have always been interested in farming and food-related issues, where positions of leadership traditionally have been reserved for men. Sustainable agriculture is seen by many of these men as a challenge to their

positions of male privilege because it challenges their male-dominated way of farming. This has left opportunities open for bright, articulate, motivated women of all ages to take on leadership responsibilities. I believe also that the guiding principles and characteristics of sustainable farms and food systems are more in harmony with personality traits of females than males. Industrial agriculture is about forcing nature to produce more cheap commodities, whereas sustainable agriculture is about nurturing nature so it can produce enough good food.

Industrial agriculture is about forcing nature to produce more cheap commodities, whereas sustainable agriculture is about nurturing nature so it can produce enough good food.

I'm certainly not an expert on feminism. However, the global women's protest against President Trump's inauguration has returned public attention to the ongoing women's movement (Booth & Topping, 2017). During the late 19th and early 20th century, the first wave of the movement addressed women's suffrage and other legal inequalities. The second wave, begun in the 1960s, focused on removing cultural and economic inequalities. The third wave, starting in the 1990s, expanded on the second wave by embracing religious, ethnic, and cultural differences among women. The new "Fourth Wave" of feminism, which emerged in the early 2000s, has been described as a "fusion of spirituality and social justice reminiscent of the American civil rights movement and Ghandi's call for nonviolent change….At its heart lies a new kind of political activism that's guided and sustained by spirituality" (Peay, n.d., para. 2).

Some social scientists associate the Fourth Wave with the emergence of social media, which has allowed the women's movement to become a multi-ethnic global movement—empowering women around the world. Perhaps more importantly, social media have allowed the Fourth Wave to evolve without needing a single leader or set of female icons to speak for the movement. Women have been able to speak publicly for themselves, as well as to find and join a diversity of shared voices. This makes the women's movement more resilient and more difficult to coopt or suppress than ever before. I believe the current women's movement reflects a natural progression from equality, to identity, to empowerment, to leadership. Many women now seem to understand that the personality traits commonly associated with being female are the traits most needed for leadership at this time in human history.

Psychologists tend to rely on the "Big Five" personality traits to define gender differences (Weisberg, DeYoung, & Hirsh, 2011). They are Neuroticism, Agreeableness, Conscientiousness, Extraversion, and Openness/Intellect. Women tend to rank higher in *neuroticism*, which is generally associated with anxiety and self-consciousness. But related traits such as emotionalism and sensitivity can also sharpen intuition and insight. Males tend to be more rational and ideological, which can lead to conceit and rigidity. Women consistently rank higher for *agreeableness*, which is associated with empathy, altruism, and kindness. Men tend to be more egocentric, self-centered, and indifferent.

Women also rank higher in *conscientiousness*, which is associated with organization and self-discipline. Men tend to be more opportunistic and sporadic. Women rank only slightly higher in *extraversion*, as they relate more comfortably with others. Men are inclined to take more social risks. No significant gender differences have been found for *openness/intellect*, which reflect imagination, creativity, and intellectual curiosity. However, the focus of imagination, creativity, or exploration may well be different for men and women. These gender differences obviously do not apply to all women or men, which is confirmed by various studies showing significant overlap along the gender trait continua.

Regardless, the gender traits generally associated with being female are far more consistent with the requisites for sustainability than those of males. Old, white men have had a natural leadership

advantage in the *mechanical* world envisioned during the Enlightenment and imposed upon the world during the industrial era of economic development. We now know that world is not sustainable. The worldview essential for sustainability is that of a resourceful, resilient, regenerative living organism rather than an inanimate mechanism. Living things must be conceived, nurtured, cared for, and renewed rather than built, managed, worn out, and discarded. Creating a sustainable food system is much more like raising a child than building an automobile. Communities and societies are sustained by considerate, cooperative, collaborative, consolatory, caring, compassionate relationships. The aptitudes, talents, and skills needed for sustainability are far more consistent with the gender traits of females than males.

Creating a sustainable food system is much more like raising a child than building an automobile. Communities and societies are sustained by considerate, cooperative, collaborative, consolatory, caring, compassionate relationships.

At the deepest level, the sustainability movement is a morally rooted movement born of a growing sense of our responsibility to take care of each other and to care for the earth. It represents a "fusion of spirituality and social justice." Sustainability will require a "new kind of political activism that's guided and sustained by spirituality." Hillary Clinton's loss in her bid for the U.S. presidency was a deep disappointment for the women's movement. She likely lost the votes of many old, white, men who felt threatened by the thought of a woman president. She probably lost the votes of even more who feared she would accommodate the "establishment"—the old, white, men. Many of today's women political leaders were elected because they lead like old, white men. I believe the American people ultimately will elect a woman president who has the courage to think and lead like a woman. I believe the sustainability food movement ultimately will succeed because is an essential part of a global women-led movement that is creating a better future for humanity.

References

Adams, A. (2016, December 20). Women in sustainable agriculture [blog post]. Retrieved from the Holistic Management International blog: https://holisticmanagement.org/blog/women-in-sustainable-agriculture/

Booth, R., & Topping, A. (2017, January 22). Two million protest against Trump's inauguration. *The Guardian.* Retrieved from https://www.theguardian.com/lifeandstyle/2017/jan/22/two-million-protest-against-trumps-inauguration-worldwide

Greenhorns, The. (n.d.). About us. Retrieved 2/16/17 from http://www.thegreenhorns.net/category/about/aboutus/

National Young Farmers Coalition. (n.d.). Who we are. Retrieved 2/16/17 from http://www.youngfarmers.org/about/who-we-are/

Peay, P. (n.d.). Feminism's spiritual wave [Blog post]. Retrieved from the Feminist.com blog: http://www.feminist.com/resources/artspeech/insp/spiritualwave.html

Weisberg, Y. J., DeYoung, C. G., & Hirsh, J. B. (2011). Gender differences in personality across the ten aspects of the Big Five. *Frontiers in Psychology, 2,* 178. http://dx.doi.org/10.3389/fpsyg.2011.00178