

PLACE-BASED FOOD SYSTEMS KEYNOTE ADDRESS

Place-based food and farming systems: Reconnecting people with purpose and place

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We are living through a time of fundamental change in human society, as is becoming increasingly clear. Climate change, fossil energy depletion, loss of biodiversity, and growing social and economic equity all threaten the future of human civilization. Only the most adamant deniers fail to accept the necessity for change. The primary point of contention seems to be whether the current global challenges can be met by transitioning to a new phase of *economic* development or instead will require a fundamental transformation to a new era of *human* development.

Note: This paper is adapted from a keynote address entitled "Putting it all Together: Synthesis and Call to Action," given on August 10, 2018, at the closing of the Place-Based Food Systems Conference, hosted by the Institute for Sustainable Food Systems at Kwantlen Polytechnic University. The conference brought together community and academic leaders to share research and practice and to foster effective collaboration. More information is at https://www.kpu.ca/pbfs2018. Defenders of economic growth as the primary indicator of progress tend to place their faith in future technological developments that will be

* John was raised on a small dairy farm in southwest Missouri and received his BS, MS, and Ph.D. degrees in agricultural economics from the University of Missouri. He worked in private industry for a time and spent 30 years in various professorial positions at North Carolina State University, Oklahoma State University, the University of Georgia, and the University of Missouri before retiring in early 2000 as professor emeritus. Since retiring, he spends most of his time writing and speaking on issues related to sustainability with an emphasis on economics and agriculture. He is author of six books (available through Amazon via http://johnikerd.com/ books). In 2014, Ikerd was commissioned by the Food and Agricultural Organization of the United Nations to write the regional report, Family Farms of North America, in recognition of the International Year of the Family Farming. He currently resides in Fairfield, Iowa, with his wife, Ellen, two dogs, and two cats. More complete background information and a wide selection of John's writings are available at http://faculty.missouri.edu/ikerdj/ and http://johnikerd.com. motivated by economic incentives. As the challenges of climate change and fossil energy depletion grow more critical and are better understood, economic incentives for the development of technologies to mitigate the negative impacts on society will increase. Market economies respond to scarcity. As clean air and clean energy become scarcer, they become more economically valuable. Greater economic incentives will provide motivation for new technologies to mitigate climate change and develop substitutes for fossil energy. Whenever public policies are deemed necessary, "marketbased" solutions are favored over government regulations and restraints.

Its defenders believe economic growth is still the ultimate means of alleviating hunger and poverty and reversing current trends toward greater economic and social inequity. They do not concede the existence of finite ecological limits to economic growth. They believe we simply need to use the remaining fossil energy more efficiently, while we transition to renewable energy and use new technologies to reverse climate change and eliminate our dependency on biologically diverse ecosystems. "Dematerialization" is a term used to define the process of making economic growth less dependent on the natural resources of the Earth. "Ephemeralization," the ultimate goal, is 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, n.d.).

Those who believe in finite limits to economic growth believe a fundamental transformation of human society will be necessary to avoid a civilizational collapse. William Rees, a prominent ecologist, documents the impacts of economic development on the Earth and concludes that the "ecological footprint" of humanity has already exceeded the long-run carrying capacity of the Earth (reference his article in this issue of JAFSCD, Rees, 2019). He has concluded that a major change in global climate is likely inevitable, and will have catastrophic effects on the future of humanity. Shifts to renewable energy and pollution-mitigating technologies may slow the rate of ecological disintegration, but a civilizational collapse is highly likely, if not inevitable.

Wes Jackson contends that past economic progress has been largely dependent on readily accessible, inexpensive, and relatively "clean" sources of fossil energy (Jackson, 2019). Old growth forests, shallow veins of coal, and accessible pools of oil and natural gas have fueled the early stages of industrial economic development. However, the old growth forests are gone, and the remaining sources of fossil energy are less accessible and thus more expensive to extract, economically and ecologically. Far fewer kilocalories (kcals) of energy are produced relative to kcals of energy required for extracting and refining the remaining stocks of fossil energy than in earlier times. Each kcal of a new fossil energy source, such as fracked oil or natural gas, also releases more pollutants into the environment than did previous energy sources.

Thus far, new technologies have failed to even offset the impacts of less available and more costly sources of energy. "De-energization," or increased energy efficiency, has only led to increased energy use and greater environmental pollution as the economy has continued to grow. Jackson believes that humanity has reached the end of the "Neocaloric era." The only solution will be a transformation to a new "Ecozoic era," a term coined by Thomas Berry in the book The Universe Story (Swimme & Berry, 1992) to describe a new geologic era. In the new era, humans will live in a mutually beneficial relationship with the Earth and the other living and nonliving things of the earth. Technology is fundamentally incapable of separating the well-being of humanity from the well-being of the Earth's integral community, of which humans are both members and caretakers.

Human progress in the new Ecozoic era will require an economic system that is fundamentally different from the economic systems of the Neocaloric era. Industrial economic development has provided, and still provides, the foundation for both capitalist and socialist economies. Industrialization was designed for maximum economic efficiency in extracting and exploiting the Earth's natural resources, the ultimate source of all economic value. However, these resources are finite and limited, and thus their usefulness and value ultimately will be exhausted through continuing extraction and exploitation. All forms of resource utilization for economic development require the use of energy. According to the first and second laws of thermodynamics, energy can't be created or destroyed, but each time energy is used some of its usefulness is lost through the process of entropy (OpenStaxCollege, n.d.). Industrial economic development is simply not "sustainable."

As Eric Holt-Giménez explains in his book, A Foodie's Guide to Capitalism: Understanding the Political Economy of What We Eat, capitalist economic systems inevitably tend toward concentration of economic power and wealth (Holt-Giménez, 2017). With economic power comes political power, which inevitably leads to economic inequity and social injustice. The dominant economic and political power in most so-called developed nations is now held by multinational corporations rather than individuals. This "corporatization" of capitalist economies has removed previous spatial and temporal limits to economic extraction and exploitation. Corporations can operate everywhere and can live forever. Socialist societies suffer a fate similar to capitalism. Socialist oligarchs eventually emerge and use their economic and political power to exploit the natural resources under their control for their personal benefit rather than the benefit of their constituents. As the Neocaloric era comes to an end, avoiding a civilizational collapse will require more than reforms in economic policy. Life in the Ecozoic era will require an economic transformation.

The global food system is now the front line in the battle between those who put their faith in transitional agri-food technologies and those who believe nothing less than transformational change in agri-food systems can meet the future food needs of humanity. In spite of persistent denials, both sides in this battle are coming to the realization that today's so-called modern food system is not sustainable. Mounting evidence of the negative impacts of industrial agri-food systems on the natural environment, public health, animal welfare, and quality of rural life is becoming increasingly difficult to deny and impossible to ignore. Virtually every major agri-food corporation now includes a commitment to sustainability in its mission statement and issues an annual sustainability report to convince its investors and customers that the corporation is responding to growing public concerns. However, with few exceptions, corporate sustainability programs today are clearly transitional rather than transformational.

Transitional technologies tend to focus on separating and insulating agriculture from the ecological and social environment in which farms and farmers must function. For example, confinement livestock and poultry operations remove animals from their natural habitat and isolate them physically and visually from public exposure. Similarly, hydroponic vegetable production removes crop production from reliance on soil fertility as well as the vagaries of weather variability and changes in climate. Both of these technologies are now allowable under U.S. standards for "organic" food production. Genetic engineers are working to weatherproof crops to cope with an increasingly volatile climate. GPS-guided robots and drones are being developed and tested to reduce future needs for farmworkers and the associated risks to public health. Separation of agriculture from nature and society seems to be the ultimate objective of all of these industrial technologies.

The logical alternative to technological transition is transformational change, to replace industrial agriculture with systems that reconnect agriculture with nature and society. Today, non-industrial farming systems go by various names, including organic, ecological, biological, biodynamic, sustainable, resilient, regenerative, and restorative agriculture, as well as permaculture, holistic management, and nature farming. The unifying principle of all of these systems is recognition and respect for the inherent interconnectedness of agriculture with its natural environment-with the air, water, soil, and energy flow of nature. The ultimate goal of these transformational farming systems is to find ways to meet the agri-food needs of humans by farming in harmony with nature, rather than trying to either conquer nature or separate farming from nature.

The concept of "agroecology" provides a unifying conceptual framework for these and other agri-food systems that reconnect agriculture with both nature and society. Miguel Altieri, an intellectual pioneer and longtime advocate, has called agroecology "the science of sustainable agriculture." He describes agroecology in terms of farming systems that are rooted in the science of ecology (Altieri, 2000). Ecology is a study of the relationships of living organisms, including humans, with the other elements of their natural and social environment. A common phrase in the discipline of ecology is: "You can't do just one thing." The relationships in agroecosystems are incredibly complex—living soils, plants, animals, people... Everything is related to everything else, somehow, in some way. Anything a farmer does affects everything else on the farm—some in small ways and others in important ways. The unintended consequences may appear either quickly or at some time in the distant future.

Agroecology respects the "ecology of place." Every agroecosystem is unique, in that unique relationships constitute unique wholes-even for wholes made up of similar components. The farmer is a member of a farm's integral agroecosystem, and the relationship between a specific farm and specific farmer is critical to the farm's success or failure. Agroecology also respects "the social ecology of place." In agroecology, humans are treated as part of the Earth, rather than apart from the Earth. Farms and farmers are inherently connected with the specific communities and societies within which they function. The economic sustainability of a farm obviously is interdependent with the willingness and ability of people in its local community, or the larger society, to buy its products at profitable prices. Less appreciated, the quality of life of farmers and farm families are critically affected by their personal relationships with others in their communities-their sense of acceptance, belonging, and self-esteem.

Agroecology also provides a conceptual framework for growing local food movements in the U.S and around the world. For example, agroecology was a natural choice for the global food sovereignty movement. Food sovereignty is a term coined in the mid-1990s by La Via Campesina, which is "one of the largest social movements in the world, made up of more than 200 million small and medium-scale farmers, landless people, women farmers, indigenous peoples, migrants and agricultural workers" (Global Justice Now, n.d.). In 2007, more than 80 countries signed the Declaration of Nyéléni, which proclaims "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" (Nyéléni Forum on Food Sovereignty, 2007).

Agroecology supports the principles of food sovereignty in that it is a science-based approach to "ecologically sound and sustainable farming methods" that can be used to produce "healthy and culturally appropriate foods" and to retain the rights of people "to define their own food and farming systems" that respect the natural and social ecology of place. Although less prominent in the U.S., agroecology seems a natural choice to provide a science-based conceptual foundation for the local food movement. If this movement is to be sustained, it must be an alliance or network of local, community-based food systems committed to the purpose of producing food in harmony with nature and community. Otherwise, in an attempt to "scale up" to access larger markets, it is likely to be coopted and integrated into the industrial food system. A commitment to agroecology is a commitment to food systems that reconnect people with purpose and place.

Fundamental transformations in agri-food systems, economies, and societies will all require a recommitment to purpose. The existence of purpose cannot be proven scientifically. Thus, the very existence of purpose-in any sense other than some innate desire to continue living-has been vigorously denied by scientists and is routinely ignored by contemporary society. From the time people are children, most are taught to think critically and rationally, meaning they should not believe anything that can't be proven scientifically. However, people behave instinctively and intuitively, as if life has purpose. Without purpose, it wouldn't matter what people did or didn't do. There would no means of distinguishing between right and wrong or good and bad. Anything would be okay-or not; there would be no way of knowing. In spite of a supposed belief in scientific rationality, people still behave as if life has purpose.

In the absence of a serious inquiry or thought given to purpose, many people seem to have accepted earning and accumulating money as their purpose—or at least as a proxy for purpose. This contains an element of rationality. Money has no intrinsic value; it is simply a *claim* to something of potential value. The uniqueness of money is that it can be used to claim anything that can be bought with money. A person who has money can buy and do many different things—the more money, the more things. Money also can be saved as a hedge against some of life's uncertainties. In the absence of a clear idea of what people are meant to do with their lives— their purpose— acquiring and accumulating money might seem to be a logical purpose for committing their time and energy to a particular endeavor.

The fundamental problem is that over time, money has become the cultural measure of success—of society's validation of a life of usefulness, worth, or purpose. Power and fame also are accepted measures of success, but power and fame almost invariably lead to economic success—to money. Over time, people in so-called developed societies seem to have forgotten that acquiring money is not a reflection of a life of true worth or purpose, unless it is used to contribute to some worthwhile purpose or the greater good. Those who are unable or unwilling to commit sufficient time and energy to endeavors that earn money are considered as worth less than others, or even worthless.

An over-reliance on money to meet basic needs also has led to a growing disconnect of people from each other and from the other living and nonliving things of the Earth. Everything of use or of value in sustaining human life on Earth, including everything of economic value, ultimately comes from the Earth-minerals, soil, water, air, energy. There is no other source. Beyond self-sufficiency, or meeting needs individually, people must rely on other people. They may rely on people they know personally-within families, friendships of local communities-to meet some of their needs. Money and markets allow people to meet their needs through impersonal relationships or transactions, buying and selling, rather than through barter or gifting. People can earn and spend money to get what they need or want that is produced by people whom they don't know personally.

In fact, economic value is inherently *impersonal*. If something can't be bought, sold, or traded, it has no economic value. Relationships with a spouse, children, or friends may be the most valuable and important aspects of a person's quality of life. However, people can't buy, sell, or trade personal relationships; so they have no economic value. Some economic value may accrue as a consequence of such relationships, but the purely personal or social connection with another person is of value only to those who share personal relationships.

Over time, increased reliance on the money economy and diminished necessity for personal relationships weakened the social cohesion within families, communities, and society. Reliance on economic transactions rather than self-reliance has also weakened the social sense of connectedness with things of Earth—the source of all real wealth. Increasing economic inequity and social injustice, and relentless resource depletion and ecological degradation during times of tremendous economic growth and individual wealth, are logical consequences of a growing sense of disconnectedness. This is the legacy of the industrial era of economic development. The call for transformational change is a logical response.

The call for transformational change is also being driven by questions of sustainability, which means, by the most general definition, the ability to meet the needs of the present without diminishing opportunities for the future. Ecological integrity, social justice, and economic viability are generally accepted as the three essential pillars of sustainability. The most fundamental flaw of industrial economic development is that economic growth is simply not sustainable in a world with finite productive resources and capacity to absorb and detoxify waste. However, as Molly Anderson points out, "Sustainability per se is an empty goal for food system reform, unless what will be sustained and for whom are specified" (Anderson, 2008, p. 593). Transformational change in the agri-food system must be motivated by a sense of purpose that transcends money and impersonal economic values.

Among the essentials of agri-food sustainability, Anderson (2008) includes *democratic participation in food system decisions, absence of human exploitation,* and *absence of resource exploitation.* In his book, *Development as Freedom,* Amartya Sen (1999) points out that freedoms without the capability to fully utilize or express them are limited and, in extreme cases, are not freedoms. For example, someone might have the right to vote but be barred from voting by restrictive voter registration rules or be unable to travel to the polling place. So a person or community who has the right to determine their own food system, but lacks the capacity or authority to do so, still has no food sovereignty or opportunity for agri-food sustainability. Sen includes *economic facilities, political freedom, social opportunities, transparency guarantees, and protective securities* among essentials for true freedom. He argues that authentic human development requires securing greater freedoms.

Consistent with Sen, Anderson (2008) suggests that authentic agri-food sustainability must be framed in terms of basic human rights. She identifies food security, health, decent livelihoods, gender equity, safe working conditions, cultural identity and participation in cultural life as basic human rights. As she points out, food supply chains that strive to meet the multiple goals of social justice, economic equity, and environmental quality are gaining popularity in the U.S. However, she feels that terms such as community-based, local, and sustainable are generally assumed to include assurance of basic human rights, whereas in many cases even social or economic equity is given little if any consideration. She advocates a new concept of "rights-based food systems," which clearly connects localization and social justice with agri-food sustainability.

Gail Feenstra, Tracy Lerman, and David Visher (2012) define "values-based supply chains" as nondirect market channels "where consumers receive information about the social, environmental, or community values [essentials of agri-food sustainability] incorporated into the production of a product, or the farm or ranch producing it" (p. 4). Processors, distributors, packers, shippers, wholesalers, and retailers, as well as farmers and ranchers, may all be involved in the supply chain. Regardless of how many are involved, the specification of the non-economic values embodied in the production process must be preserved throughout the supply chain. "Value-based" supply chains thus depend on "transparent, collaborative, equitable relationships based on trust, and work together to make sure everyone benefits, and in

particular the farmers and ranchers" (Feenstra, Lerman, & Visher, 2012, p. 4).

These authors identify the difficulty in establishing and maintaining *trust* as the most important obstacle to transformational change in the agrifood system. Relearning the art and science of positive human relationships may well be the greatest challenge in transforming the agri-food system to achieve sustainability. Values-based food supply chains could conceivably include a commitment to basic human rights as well as shared core social values. Few if any in the U.S. today actually do so, and many do not include commitment to any social values.

To emphasize the social and ethical nature of authentic sustainability, John Ehrenfeld (2014) advocates modifying the definition of sustainability to "the creation and maintenance of flourishing" (para. 15). He agrees with Anderson in pointing out that the word sustainability is a noun, and nouns are meaningless in practice unless they refer to something. He suggests the purpose of sustainability, what is to be sustained, is human flourishing, which he defines as "a measure of the fullness of life, not some material metric" (para. 14). He writes that flourishing "comes when one can say that life's cares are being attended to - when every human being is successfully caring for themselves, other humans, and the non-human world that is vital to our maintenance" (para. 14).

The logical place, then, to look for guidance in the quest for sustainability as assurance of basic human rights, sustainability as freedom, or sustainability as flourishing would seem to be the wisdom of Indigenous peoples. People living in hunting and gathering societies understood the importance of caring for themselves, other humans, and for the non-human world (Ikerd, 2014). They didn't need science to validate the rationality of their sense of connectedness. They had intimate relationships with the earth and with all of the living things with whom they shared the earth. They lived with nature and depended on nature for food, clothing, and shelter. Indigenous peoples also depended on their families, tribes, or villages for protection from enemies and assistance during times of need. They shared the tasks of securing food, clothing, and shelter with others.

Furthermore, their lifestyles reflected a personal sense of connectedness with other people that went beyond meeting their physical needs. They formed gifting economies in which people actually strive to give away more than they receive in return. They understood that humans are inherently social beings; people need to relate to each other personally. Their ethical and cultural values concerning their relationships with each other and with nature evolved from these personal relationships.

They also passed on stories and rituals that reflected their sense of spiritual connectedness. They considered stewardship or caring for nature to be a distinction of honor—a sacred trust or responsibility. Their stories reflected a sense of kinship with the animals, and even the plants, from which they derived their sustenance. They did not take food from nature; instead, nature gave them food—and they gave back to nature in return. Indigenous peoples understood they were socially and spiritually connected, not only with other people, but with all the living and non-living things of the earth.

With growing concerns for the sustainability of today's disconnected world, there is a resurgent respect for the wisdom of Indigenous peoples who have refused to sacrifice their sense on interconnectedness with all living and non-living things of the Earth. Pauline Terbasket, executive director of the Okanagan Nation Alliance, proudly confirms: "For Syilx Okanagan peoples, our food systems have been deeply rooted in our territory and are articulated in our origin *captikwl* (stories). These are embedded in deeper worldviews that understand the reciprocal nature between Syilx Okanagan peoples and our territory" (Terbasket, 2018).

Dr. Janette Armstrong, when asked how she would define sustainability, replied: "With great difficulty, because I'm a fluent speaker of my language, and if I try to translate that, or even interpret that into my language, it's not a very good word. Though in the intent of that, in terms of how unsustainable this culture is towards the resources on the land, towards what community is, and what people really are, within that, the word seems to have a better meaning than some of the other words. Sustainability on one level means to be able to maintain and sustain the fullness of health that needs to be there for us to thrive, and for everything else to thrive. In that context, it sounds like it fits with the way I would think about sustainability in my language. But the way in my language that it translates is sustaining the human abuse to a certain level, and keeping it at a level that it doesn't quite destroy everything. So that's not an adequate definition. . . . It's not just about the land, but it's about yourself. That issue in our traditional teachings is: every year, continuously, the people who are caretakers, and people who are careful of the harvest, whoever they might be, are reminded at our ceremonies and at our feasts that that is what our responsibility and our intelligence and our creativity as human beings are about. If we cannot measure up to that, and we cannot live up to that, we're not needed here, and we won't be here" (Armstrong, 2007, p. 4). Sustainability is not just a human right; it is also a human responsibility.

Indigenous concepts of food sovereignty also reflect a reciprocal relationship between humans and the earth. Charlotte Coté lists four main principles of "Indigenous food sovereignty" identified at a conference of Indigenous elders, traditional harvesters, and community members: "(1) Sacred sovereignty: food is a sacred gift from the Creator; (2) Participatory: is a call to action, that people have a responsibility to uphold and nurture healthy and interdependent relationships with the eco-system that provides the land, water, plants, and animals as food; (3) Self-determination: it needs to be placed within a context of Indigenous self-determination with the freedom and ability to respond to community needs around food; (4) Policy: provides a restorative framework for reconciling Indigenous food and cultural values with colonial laws and policies" (Morrison, 2011, in Cote, 2016, p. 9). Indigenous food sovereignty is rooted in spirituality as well as social and ecological responsibility, selfdetermination, and reconciliation.

Coté points out that Indigenous cultures have been shaped by deep and meaningful relationships to the land, water, plants, and animals that have sustained them. She notes that Indigenous communities are distinct, so it is impossible to define food sovereignty in a way that reflects the realities of each tribe or community. So Indigenous food sovereignty is inherently place-based or connected to the Earth in particular places, including the people who occupy those particular places. However, all sovereign tribes of communities are united by the same "eco-philosophical principles that have guided their interactions with the environment and the non-human world that has informed their food systems" (Cote, 2016, p. 9).

There seems to be a general public awakening to the Indigenous wisdom that national and global problems must first be addressed locally. Although there are common principles that permeate the whole of reality, every ecological place and social community is different, not trivially different but importantly different. In his book, How to Thrive in the Next Economy, John Thackara focuses on "bioregionalism" as a means of escaping from an economy that devours nature in the name of endless growth (Thackara, 2015, p. 31). He highlights local initiatives to address problems related to soils, forests, water, food, housing, clothing, health care, the commons, and other basics of life and Earth. The Business Alliance for Local Living Economies (BALLE) "represents thousands of communities and conveners, entrepreneurs, investors and funders who are defying business as usual" (BALLE, n.d., para. 1). For more than 15 years BALLE has been "imagining, incubating and refining new systems, and then moving beyond them. 'Buy local' - once a radical rallying cry - is now mainstream" (BALLE, n.d., "Mission," para. 3).

Perhaps the greatest obstacle in relocalizing economies and societies will be reestablishing the individual identity of local communities and at least a degree of community sovereignty. The corporatization of capitalist societies has removed much of the political and economic sovereignty of local communities. One-size-fits-all federal and state laws now preempt local laws needed to protect fragile ecosystems of specific bioregions. International and interstate trade laws prevent local communities from protecting local natural ecosystems and local community members from economic exploitation. However, even in the U.S., some limited means remain for local communities to claim at least a degree of food sovereignty, where ecologically and socially responsible, place-based food systems can be established and flourish. This seems the logical place to begin, or more accurately continue, localizing the larger economy and society.

Municipalities or other local governments have the authority to use existing public lands, or acquire additional lands, to support production for local, community-based food systems. Agricultural land trusts allow publicly or privately owned farmlands to be preserved indefinitely for sustainable production of food that could be used to support local food systems (American Farmland Trust, n.d.). Federal and state laws allow a variety of local zoning and land-use plans and ordinances to preserve land for agricultural uses. Such laws presumably allow municipal and county governments to designate local agricultural areas as sustainable agriculture or socially responsible agricultural areas. Even in cases where state laws prohibit the exclusion or regulation of agriculture within such areas, local governments could certainly encourage sustainable agriculture and discourage industrial agriculture in areas preserved to support local food systems.

Local public utilities also might provide a means of insulating sectors of local economies from the competitive pressures of national and global economies. Public utilities are commonly used for providing electricity, natural gas, water, and sewers, but would seem logical and legal means of providing any essential public service to everyone in a community. In essence, public utilities establish legal monopolies for the provision of specific public services. "Community food utilities" would seem a logical means of procuring locally grown food for local public schools, hospitals, elder care centers, and other local public services (Ikerd, 2016). This would give fledgling local food systems protected economic bases from which they could expand to serve their broader communities. Fledgling industries have always required government protection to become established.

Through consensus, a community could proclaim "local food sovereignty" and define enough safe food to meet basic nutritional needs as a "community right." Local community food utilities might then be utilized to integrate all current government food assistance programs into a single community-based food assistance program. The local utility could show a preference for local producers by procuring as much of its food needs as possible from local, sustainable producers. Land owned by the local government, land in local food trusts, and land in sustainable agriculture preservation areas could be integrated into the community food utility. Local taxpayers could agree to make up any revenue shortfall—the public cost of food sovereignty.

All local organizations involved with food sovereignty functions could be democratically organized to ensure the basic democratic rights of all to participate in the process of governance. Over time, community food utilities could be expanded to community economic utilities, which would not only ensure the basic needs of all for food, clothing, and shelter, but also would ensure that all have the "capacities and abilities" to fully participate in the public life of their communities. In return for assurance of these basic human rights, all people who receive benefits from the utility would be required to contribute whatever they are able to contribute to the good of the community, regardless of economic value. Those who contribute ethical and cultural value as well as social value to the community would be rewarded equally with those who contribute economic value. Responsibilities would be linked with rights, as in Indigenous cultures.

As such communities learn from their mistakes and increase in efficiency and effectiveness, their numbers would naturally multiply, eventually giving them the political power to change state and federal laws to accommodate their further development. The objective would not be to create a new equivalent of today's industrial agri-food system or industrial economy, but instead to replace current systems with networks of "locally sovereign" community-based food systems and economies. These communities would all share a common commitment to caring for each other and caring for the other living and non-living things of the Earth.

Within the larger national and international communities, competitive market economies would function within the bounds of socially equitable and morally just societies. The lower bounds of economic and individual freedoms would be defined by sets of basic human rights, including economic rights to the basic necessities of life. The upper bounds of the economy would be defined by limits to the use of natural resources-the other living and non-living things of the Earth-to ensure their integrity and sustainability. The upper bounds would also be defined by limits to economic and social inequity, to ensure a sense of fairness and commonality. Within these bounds, opportunities would exist for some to have incomes and wealth far greater than others, reflecting their greater economic contribution. However, differences would not so great as to deny the economic rights of any or threaten the social foundation of society.

The greatest challenge of transformational change would likely be reestablishing the personal relationships essential for sovereign communities. Meaningful personal relationships have been sacrificed for the sake of economic efficiency. The art of personal relationships has been lost, and the science of personal relationships has yet to be fully explored. Reconnecting with each other, and with the Earth in a meaningful sense, will also require a recommitment to a higher purpose than the pursuit of income, wealth, or economic growth. It will require a commitment to "sustainability as flourishing"-to well-being or happiness. To meet the challenges that threaten humanity with a civilizational collapse, people must become reconnected with their purpose for relating to other people, and relating together to a particular community or place. There is no better place to begin or to continue this process than in communities committed to sustainable, place-based food systems.

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