

Social and Cultural Obstacles to Sustainable Food Systems

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Brian Richard

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

Brian Richard

STS Advisor: Peter Norton

Most modern agriculture techniques cause environmental harm (Clay, 2004). Industrial agriculture practices such as monocropping, petroleum-based fertilizer use, chemical pest control, and large livestock feedlots are the main targets of criticism. Global crop yields have declined since 2011 (Ritchie, Roser, & Rosado, 2021), indicating that the harm inflicted is affecting productivity. These practices extract more than the environmental systems they rely on can support. To reverse these trends, some seek to introduce (or reintroduce) production practices or food products that minimize environmental impact in the form of sustainable food systems. These reforms encompass measures to change food production and change the types of food produced to bring the systems back into alignment with the environment, decrease resource consumption, and improve food security. Proponents of sustainable food systems champion topics such as regenerative and organic farming, veganism, and local food sources.

Participants in this area include at least two classes of producers: innovators and industrial agribusiness. Innovators are characterized by their desire to develop systems with minimal environmental impact. Examples range from traditional small family farms with a mind for sustainability, to practitioners of agroforestry and regenerative farming. Some of these innovators have organized into several coalitions and advocacies. Through the National Sustainable Agriculture Coalition (NSAC) producers exert influence over legislation that affects agriculture sustainability and equity. As NSAC director Sarah Hackney says, “Farmers’ voices and experiences are critical to informing federal food and farm policy” (NSAC, 2022). Larger agricultural trade organizations also participate. These groups represent the status quo of agribusiness and typically represent interest in a specific crop, or a particular type of product. As he became president of The National Corn Growers Association (NCGA), Tom Haag says “It will take all of us

to ensure our voice is heard in Washington D.C., while also increasing demand for our product” (Busse, 2022). The valuing of one crop above all, puts groups such as this at odds with proponents of sustainable changes to the industry. Their size gives them power.

Agrichemical companies also have a significant amount of power. The agrochemical industry is controlled by a several large international corporations. They have organized into an international trade organization called Crop Life International. Crop Life Director of Regulatory Affairs, Laurie Goodwin states “These findings will provide a basis for future discussions and open collaborations between stakeholders and governments around modernizing approaches to regulating genetically modified crops, to make new agricultural innovations readily and widely available for all” (CLI, 2021) in response to the release of Crop Life’s research on regulatory modernization.

Regulators such as the Food and Drug Administration (FDA) and the US Department of Agriculture (USDA) will participate in the development of new food sources (FDA, 2020). The US food industry is one of the world’s most heavily regulated industries. The power of regulation can be used to promote innovation or to protect the status quo.

Consumers’ relationships with food vary; some prioritize environmental or social values, many prioritize cost, and some prioritize food culture and heritage. Some consumers have organized an advocacy called Consumers International. To them, the environmental demands of food systems are excessive, and they work to ensure consumers are not subjected to undue pressure. As they stated, “Consumers will only be able to make these changes if supported by structural shifts and ambitious political action.” (CI, 2022). Consumers, and their views on food, are diverse. Their actions are difficult to anticipate.

Some consumers and producers alike advocate for a shift from all animal-based food products. Vegans or plant-based food proponents cite several reasons including, ethics, health, and environmental. Twitter user Simon V states “Go vegan. Stop hunting. Stop using land to feed animals for slaughter and grow food for people. It really is that simple.” (@jutebug, 2020). As Simon mentioned, the environmental argument for veganism stems from the large land requirements for sustaining large numbers of livestock, but there are also water consumption and pollution arguments for plant-based food systems. The succinct wording of the tweet does not reflect the nature of the movement. Vegans are varied and decentralized.

Several restaurant operators and chefs share values with the Innovators and have organized into the advocacy Green Restaurant Association. GRA founder Michael Oshman explains “the GRA invested almost its entire team and thousands of hours into investigating every crevice of progressing the restaurant industry into environmental sustainability” (Oshman, 2022) referring to the group’s efforts over the pandemic.

Advocates of sustainable food systems face many challenges. Agriculture in the US over the last 70 years has been defined by high crop yields and low costs in the grocery store (USDA, 2021). The strategies proponents employ will need to resist entrenched agribusiness interests and a consumer population with a complex economic and cultural relationship with food. Food culture and prevailing societal norms present obstacles to the advancement of these efforts. These obstacles can be classified as communication challenges and social reactance to change. Proponents of food system reform are varied, but all face some of these obstacle categories.

Review of Literature

Existing research into modern industrial agriculture (termed agribusiness by some) provides an indication of the motivation for the proponents of sustainable agriculture. Analysis of industrial food production has looked at the use of chemical fertilizer, biocides, feed lots, antibiotics, tilling, and monocropping in relation to human and environmental health and found concerning trends in both. (Horrigan, Lawrence, Walker 2002) In the social sciences, research shows a link between cultural diversity and crop diversity, explaining that areas with a larger number of crops in the fields show greater cultural distinction from nearby groups. Lack of crop diversity (monocropping) being one criticism of industrial agriculture. (Jacques, Jacques 2012)

Outside of food production, research has attempted to define the social and personal significance of food. Food is deeply tied to one's sense of personal and cultural identity (Almerico, 2018). This social link to food will complicate the efforts of those wishing to reform or alter the availability of food for a population.

The link between food and people was analyzed specifically within the context of sustainable agriculture in a pair of case studies by Wendy Parkins and Geoffrey Craig titled 'Culture and the Politics of Alternative Food Networks'. The study looked at a larger organization called Slow Food that sought to network smaller sustainable food producers, and at a smaller scale farmers market where they studied the interface between producers and customers. The Slow Food analysis showed a search for balance between the virtues of local food systems and the resilience of a global market. The farmers market analysis showed a complex and vibrant market environment centered around community members and food. (Parkins, Craig 2009)

Economic and market trends are often used as indicators of public values and perceptions. Regulators, private organizations, and Think Tanks have performed a plethora of market research over decades on most aspects of food production. Some of which are relevant to the culture around sustainable food systems. One study by the USDA measured the various markets available to local food producers and their various contributions to sales (Fig 1) (Martinez, 2021). The marketing and business strategies could show where these businesses seek to make connections with customers. Likewise, these trends could indicate where customers are willing to engage with these businesses.

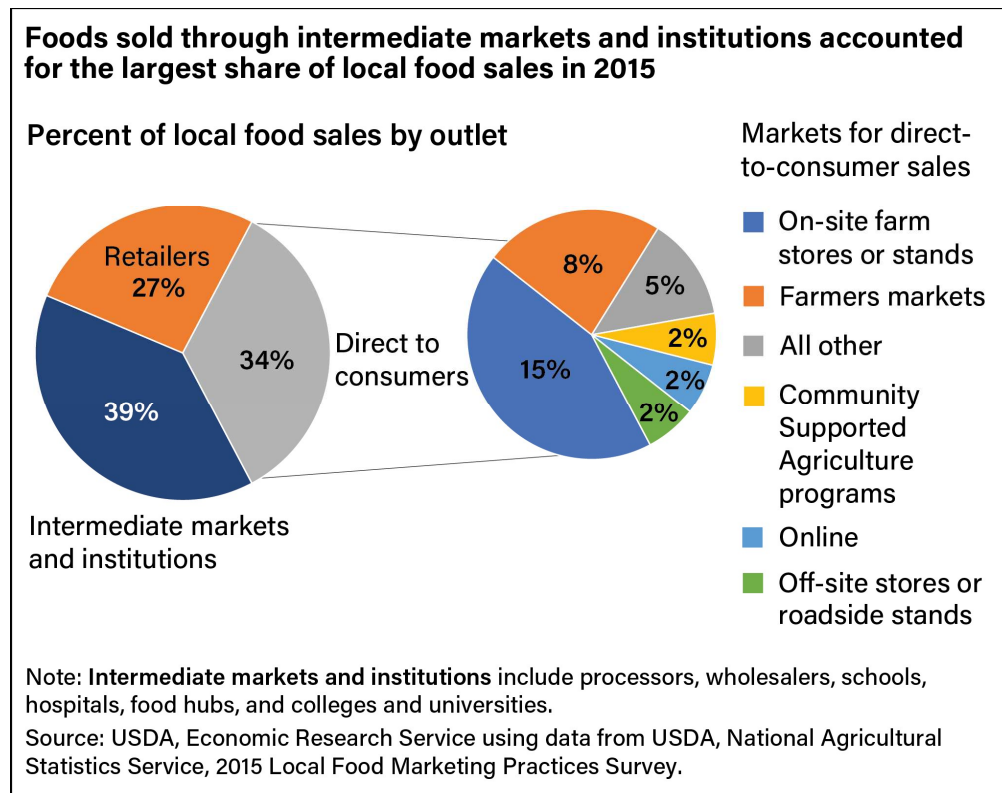


Figure 1 (Martinez, 2021)

Social Perceptions of Organic Food

Organic foods are one of the most widely recognized deviations from modern industrial agriculture. Organic food products are often sought out for health reasons, there are also environmental arguments. As defined by the USDA, organic foods are those produced without artificial fertilizers, pesticides, herbicides, and other additives. There is a long list of allowed and prohibited substances that food producers need to track and document to achieve USDA organic designation (McEvoy, 2019). The fact that some biocides are allowed, and some are not, creates confusion among consumers. The premise behind organic food is that they are better for those eating them and for the environment. Many consumers are not convinced, and the complex nature of organic certifications does not help. One argument against organic is that crop yields are lower without the use of industrial fertilizer. Reddit user u/Kman17 states “intentionally opting out of higher efficiency farming techniques means your crops have lower yields. Which means you need more land area and can’t feed as many people” (u/Kman17, 2023). This argument rings true for a lot of people and hurts the environmental arguments for organic food. Another Reddit user u/jackd188 adds to the argument with socioeconomical perspectives on organic food saying, “There’s only so much land that is used for growing food, so using it to grow less food so snobby people can feel healthy is just ridiculous” (u/jackd188, 2022). Twitter user Michael Melgar calls organic food “a scam and a fad that only an overfed, self-indulgent society can afford” (@mmelgar, 2018). The sentiment that organic food is a luxury is not unique, Kevin Thomas on Twitter explains “I’m on a very low income and it doesn’t allow me to eat full organic sad as it is, it’s just too expensive to eat responsibly” (@Docshady1977, 2019). This luxury status supports a narrative that eating organic and sustainable is only available to the

wealthy. The cultural perception and inconsistent/conflicting sources of information are critical obstacles to those seeking to further the use of organic food.

Cultural Implications of Veganism

The consumer side of the food culture interface offers several challenges. The food culture relationship is powerful, especially on the consumer end. In cases of historical cultural upheaval when populations were oppressed or displaced, the cuisine of a culture can outlast even the language of that culture (Fischler, 1988). One principle of sustainable agriculture is restoring crop diversity. Diverse crop selection can be better tailored to the local environment, and community. Citing the link between cultural and biological diversity (Jacques, Jacques 2012) proponents favor sustainable/traditional agriculture alongside efforts for promoting indigenous rights, cultural preservation, and sovereignty. Food sovereignty being one way a marginalized group can preserve cultural identity (BIA, n.d.). This relationship introduces potential allies in the realm of Native/Indigenous rights and racial equity.

The link between food and indigenous rights is a boon for those advocating for diverse and sustainable crops. Unfortunately, it is a challenge and source of conflict for those advocating veganism. In Simon V's tweet "Stop hunting." was the first mandate after "Go vegan." (@jutebug, 2020). To some, efforts to alter the food production paradigm will be taken as an attack on their food culture, which as stated, is a core aspect of one's identity (Almerico, 2018). Many indigenous groups hold deep connection to traditional hunting practices. Members of indigenous groups lash out at claims that their hunting practices are harmful to the environment. Twitter user Chrystie Elle states "...vegans denounce seal hunting; they are saying seals lives matter more than Inuit lives. This is not a difference of opinions, it is oppression..."

(@ChrystieElle, 2018). Another indigenous rights advocate escalates the rhetoric saying “White colonial veganism is violence. If your veganism isn't inclusive, it's nothing more than white supremacy.” (@raisinguprebels, 2022). Two groups attempting to achieve the same goal, making food sustainable, have two very different relationships with indigenous peoples.

As seen in the phenomenon known as the “Omnivore’s Paradox” (Rozin 1976) human attitudes towards food can swing between two poles. One being to avoid unknown food, the other is to seek out new food to gain advantage over rivals. Consumers’ desire to avoid new foods poses a challenge in areas where industrially grown and processed foods are common and have inserted themselves into the culture, as normal food usually equates to safe food in the mind of consumer. To some, efforts to alter the food production paradigm will be taken as an attack on their food culture, which as stated, is a core aspect of one’s identity (Almerico, 2018). The strategies of some vegans have adapted to this reality. They have worked to separate the industrial food products from the feelings and cultural significance of the culinary heritage of the dishes. This can be exemplified in the form of vegan soul food. Soul food is commonly referring to cuisine from the southern US, of African American origin. Vegan chefs have been able to preserve the cultural significance of these dishes while introducing plant-based alternative ingredients. This can be seen in the social media presence of the vegan soul food community (i.e., Vegan Soul Food Facebook group with over 450k members, as of early 2023) (Vegan Soul Food, n.d.). This group actively avoids the political and health aspects of veganism. Thus, advancing plant-based food chains while dodging the problematic issue of getting consumers to explore new foods or deviate significantly from their culinary heritage.

Local Food and Farmers Markets

One of the most recognizable aspects of the local food movement is the farmer's market. These markets started as places for smaller local farms and ranches to sell directly to consumers. Often outdoors and organized by community members these markets provide a contrast to the more common supermarkets in the US. A survey of #farmersmarket on Twitter shows trends in the perceptions of this part of the food system. The most common usage of this hashtag involves photos of food highlighting freshness and selection. Exemplified by Tom Hall's post from March 2023 (Fig 2). This shows that consumers link the local food at these market with freshness and quality.

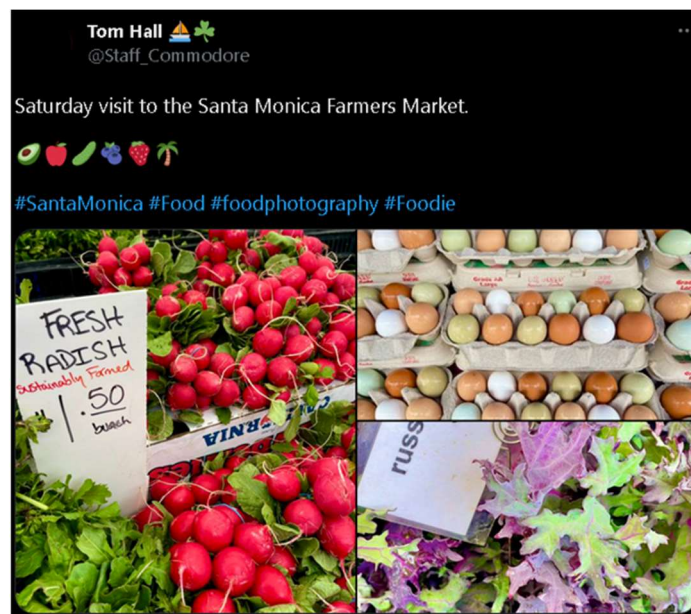


Figure 2 Tom Hall Tweet (@Staff_Commodore, 2023)

Other users of #farmersmarket share pictures of themselves, other people, and recollections of social interactions. All of which speak of a social aspect to the experience at farmers markets. Additional topics include community engagement, political outreach, health, lifestyle, non-food goods, and entertainment. These topics indicate a vibrant market environment, the same environment observed by Wendy Parkins and Geoffrey Craig in their

farmers market case study (Parkins, Craig 2009). One important aspect of farmers markets shows up rarely alongside #farmersmarket, topics of food production and food producers. An example of these rare tweets would be Isaac Simpson's Tweet from February 2023, "Apparently California is having an extraordinary mushroom season. These are chanterelles from farmer's market." (@DisgracedProp, 2023). Which is an acknowledgement to the origin of the food in question. Mentions of farmers and ranchers are seldom. The previously mentioned case study outlined two goals of the farmers market for producers, one is to sell food, the other is to build a relationship with their community and customers. The latter, allowing them to become engrained in the local food culture (Parkins, Craig 2009). The relationship between consumers and producers is not reflected often in the use of #farmersmarket. If this is taken as emblematic of the wider experiences of marketgoers and producers, this could indicate that the producers have been crowded out by everything else that farmers markets have grown to include.

Some small farms are looking to e-commerce to reach more customers. This seems like a sound business strategy considering the success other industries have seen with e-commerce. The community networking aspect would change from the one seen in farmers markets. There would be less face-to-face interaction with customers and more social media interaction as these small local businesses start engaging with customers outside their immediate communities. A version of this strategy is exemplified by Five Mary's Farm in Fort Jones California. When farmers markets proved insufficient, this farm started selling directly to customers through their website. At this point they developed a brand and have seen success by expanding their business (Five Marys Farm, n.d). The trend towards e-commerce has been seen across agriculture (Altarturi et al. 2023). This poses new questions in whether farms that sell over the internet to potentially distant customers still count as local food production. This search for balance between large

scale efficiency and small-scale character and values is addressed in the case study of the Slow Food organization by Parkins and Craig (2009). Producers that choose to use this market will need to find a way to replicate the sense of community they have with their local customers.

Local food systems have seen some recognition following supply chain issues in various regions. Many customers of local food suppliers see them as a secure alternative to grocery stores which rely on vast logistical mechanisms to move products to the shelves. When fears of food shortages circulate, some consumers share their beliefs that local suppliers have consistent stock and variety when even large chain grocery stores struggle to find and stock certain products. Following food shortage scares in the UK, Twitter user Mark Hodgkinson praises his local shop saying, “Our local garden centre grows and sells their own vegetables, No shortage when you don’t rely on the EU” (@markhod45442772, 2023) (Fig 3). Another Twitter user says “Our local greengrocers today no shortage of anything here. Looks like supermarkets are making things scarce so they can hype up the price...” (@eva_angel9, 2023). Despite the real or perceived nature of a food shortage, local food sources are valued as separate and safe from traditional grocery stores.



Figure 3 Mark Hodgkinson Tweet (@markhod45442772, 2023)

Conclusion

Among those seeking to reshape the nature of food production, food culture and attitudes provide many obstacles. The groups involved in sustainable food advancement have encountered several and some have already found solutions for dealing with them. Veganism has had mixed results when dealing with food cultures, which parallels the diverse and decentralized nature of the movement. This reflects the many facets of veganism as a movement and ideology. The message behind organic food and farming has struggled with adequately sharing information regarding its benefits and motivations, leading to distrust and skepticism among consumers. Local farming has seen success but struggles to be heard over other interests in the food market environment, causing some to adapt and change tactics. Together these obstacles are either communication challenges or cultural opposition. Indigenous people wanting to preserve their hunting heritage and consumers disgruntled with ‘organic food snobs’ are both trying to protect their food culture and that part of their identity. Compounding this difficulty is the struggle to

disseminate meaningful information. Despite food's universal importance, those seeking to ensure safe food for future generations often fail to be heard in the information climate they need to occupy.

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