



## Sustainable food defined

The food and agriculture sector includes farmers, ranchers, and fishers who grow crops, raise livestock, and harvest seafood. It also includes purveyors who create value-added food products, highlight the food experience as central to the hospitality sector, and celebrate food as part of community and lifestyle through services, channels, and platforms. These later activities connect consumers to the overall food and agriculture ecosystem and are the focus of this review.

The global food and agriculture industry is estimated to be worth at least \$8 trillion.<sup>1</sup> According to the United States Department of Agriculture (USDA), agriculture, food, and related industries contribute more than \$1 trillion to the U.S. economy annually, representing 5.4% of total annual GDP.<sup>2</sup> In 2017, 21.6 million full- and part-time jobs were related to these sectors, representing 11% of total U.S. employment.<sup>3</sup> Of this 21.6 million, 19 million workers are employed within agriculture and food-related industries including food service, eating, and drinking places (12.5

million); food/beverage stores (3.2 million); and tangential jobs related to agriculture (3.3 million).<sup>4</sup>

In 2017, American households spent \$7,700 on food and beverage (in home and out the home) according to the Bureau of Labor Statistics.<sup>5</sup> This includes \$4,363 average home food expenditures (7.8% growth over 2016) and \$3,365 spent on food outside the home (6.7% growth over 2016).<sup>6</sup> With 128 million US households, this translates to \$1 trillion spent on food annually.

Despite increased interest in sustainable food in recent years, the food sector wrestles with its role in a range of social and health problems, in addition to being one of the world's largest polluters.<sup>7</sup> For example:

## Human health and well-being

- Over-use and misuse of antibiotics in animals and humans is contributing to the rising threat of antibiotic resistance in humans.<sup>8</sup>
- 12 million people worldwide died in 2015 from dietary risks “that arise from diets low in



vegetables, nuts, whole grains, and seafood or diets high in salt (mostly from processed food) and sugary drinks.”<sup>9</sup>

- On every continent over the past 50 years, there has been a common set of changes from savory foods to sweet ones, from meals to snacks, from small independent food shops to giant supermarkets, from dinners cooked at home to meals eaten out or as takeout.<sup>10</sup>
- Measurements of fruits and vegetables show that their mineral, vitamin and protein content has measurably dropped over the past 50 to 70 years.<sup>11</sup>
- US agriculture ranks among the most dangerous industries for workers, with a work-related fatality rate of 21.4 deaths per 100,000 workers.<sup>12</sup>
- The meatpacking and poultry industries recruit and exploit vulnerable foreign workers, including refugees.<sup>13</sup>
- As of 2016, one-third of US farmworkers had family incomes below the Federal Poverty Level; the average family income was between \$20,000 and \$24,999.<sup>14</sup>

## Planetary Health

- Second only to fossil fuels, livestock emissions — including carbon dioxide, nitrous oxide, and methane — are responsible for an estimated 18-20% of global annual greenhouse gases.<sup>15</sup>
- In 2017, United Nations (UN) experts declared pesticides a “global human rights concern,” with their excessive use “[contaminating] soil

and water sources, causing loss of biodiversity, destroying the natural enemies of pests, and reducing the nutritional value of food.”<sup>16</sup>

- Globally, there are 400 low oxygen (hypoxic) coastal ecosystem “dead zones” caused by fertilizers, affecting more than 245,000 square kilometers (roughly 95,000 square miles).<sup>17</sup>
- In 2015, 33% of global marine fish stocks were being harvested at unsustainable levels; 60% are maximally sustainably fished; and 7% are underfished.<sup>18</sup>
- Agriculture and irrigation consume 70% of the world’s freshwater resources, and irrigation is essential for 40% of the world’s food production.<sup>19</sup>
- The food we waste contributes 4.4 gigatons of carbon dioxide equivalent into the atmosphere each year — roughly 8% of total anthropogenic greenhouse gas emissions. Ranked with countries, food waste would be the third-largest emitter of greenhouse gases globally, just behind the United States and China.<sup>20</sup>

The sustainable food and agriculture ecosystem depends on preserving biodiversity; supporting environmentally beneficial and low- to zero-carbon emission agriculture and fishing practices; protecting animal welfare; minimizing or eliminating non-recyclable or non-reusable packaging; preventing and mitigating food waste; ensuring equitable supply chains and labor practices; and supporting local economies. This paper will focus on products,



brands, restaurants, hospitality companies, food service providers, and others who deliver high quality products and curate experiences that advance heritage and culture, community-building, and environmental sustainability.

Creatives transform the ingredients produced by the food and agriculture ecosystem into something delicious and engaging, motivating customers to try new things and consider the impact of their eating and drinking habits on the global community, human health, and planetary health. Tasty food products and inspiring food experiences can engage consumers so that the larger investment in a sustainable food system pays off, both financially and in terms of its social and environmental impact.

## The sustainable food movement

The modern sustainable food movement grew out of the post-World War II industrialization of agriculture. Chemical fertilizers and pesticides, combined with new government policies, yielded tremendous agricultural productivity.<sup>21</sup> Along with advances in manufacturing, this meant buying and preparing food became cheap and convenient.

In the late 1960s and early 1970s, eating became a political and environmental act for the counterculture. Food had “to be grown differently, sourced differently, cooked differently [as compared to their parents’ generation]... no pesticides, no flavorings, no packages, no refined sugars or grains, and for

some, no meat.”<sup>22</sup> The natural and organic food movement saw the rise of macrobiotic diets, vegetarianism, whole grains, back-to-the-land organic farming, and co-ops.<sup>23</sup>

Increasing consumer awareness and concern about pesticides and food-borne illness scares (e.g. Mad Cow, listeria, E. coli, salmonella) throughout the 1980s-90s stoked organic food demand. In 1990, the Federal Organic Foods Production Act established “national standards governing the marketing of organically produced products, [assuring] consumers that organically produced products meet a consistent standard.”<sup>24</sup> Over time, certification membership organizations (e.g. Oregon Tilth, California Certified Organic Farmers) formed to ensure specific growing practices and prevent fraud within organics.<sup>25</sup>

Beginning in 2006, Michael Pollan’s books *The Omnivore’s Dilemma: A Natural History in Four Meals*, *In Defense of Food: An Eater’s Manifesto*, and *Food Rules: An Eater’s Manual* gained widespread recognition for critiquing the food system at large. Throughout his books, he defined what he believes to be a holistic and healthy diet, popularizing the phrase: “Eat food. Not too much. Mostly plants.”<sup>26</sup>

Food waste and its relationship to food insecurity entered the sustainable food agenda around 2010. According to the Natural Resources Defense Council (NRDC), up to 40% of the food in the United States is never eaten while, at the same time, one in eight Americans



is food insecure.<sup>27</sup> Increased awareness via an Ad Council campaign, coupled with the idea that wasted food equals wasted money, helped spark fast responses from businesses, nonprofits, foundations, and governments alike, even finding bi-partisan political support.<sup>28</sup>

## Labor

Cheap, often migrant labor was another input to the post-World War II era of industrialized food production in the U.S. In the civil rights era, farm workers' rights garnered attention and became a focus within the labor movement. In 1962, Cesar Chavez and Dolores Huerta co-founded the United Farm Workers (UFW) to address guest worker abuses and strike for higher wages, eventually forming as a union.<sup>29</sup>

The 1970s saw the advent of the first fairly traded coffee from cooperatives of small farmers in Guatemala as part of a “trading partnership based on dialogue, transparency, and respect” to further sustainable development.<sup>30</sup> Fair-trade agriculture addressed the interdependency between working conditions, environmental stewardship, and quality food products. It also introduced the idea that consumers valued knowing where their food came from, and the conditions under which it was produced.

In 2001, the Coalition of Immokalee Workers (CIW) launched the Campaign for Fair Food to “[forge] alliances between farmworkers and consumers that enlist the market power of major corporate buyers to help end that

exploitation.”<sup>31</sup> To date, the group has gotten fourteen multi-billion dollar food retailers — including Walmart, McDonald’s, Subway, Sodexo and Whole Foods — to establish third party-verified “Fair Food Agreements” that ensure more humane farm labor standards and fairer wages for farmworkers.<sup>32</sup>

Focused on point of sale in the food supply chain, the worker-led “Fight for \$15” began in New York City in 2012 when 200 fast food workers walked off the job as a demand for a minimum \$15/hour wage and union rights.<sup>33</sup> This has grown to a worldwide movement that includes other low wage workers. California, Massachusetts, New York, Maryland, New Jersey, Illinois, and Connecticut now have a \$15 minimum hourly wage.

## Food culture, products and enterprises

The international Slow Food movement began in Rome in 1989 with a manifesto for an “international movement for the defense of and the right to pleasure” that in part sought to “escape the tediousness of ‘fast-food’ [sic], [and] let us rediscover the rich varieties and aromas of local cuisines.”<sup>34</sup> Slow Food International found an early American ally in Berkley, CA chef Alice Waters, who became the group’s vice president in 2002. Waters’ restaurant Chez Panisse has championed the values articulated by Slow Food since its opening in 1971.

What started as a rebellion against the conventional food system of the 1950-70s



turned out to be a thriving market in its own right by the 1980-90s. In 1978, John Mackey and Renee Lawson founded the vegetarian and organic store SaferWay in Austin, TX which two years later became Whole Foods Market. Some of today's biggest organic brands — including Earthbound Farms, Organic Valley, Stonyfield Farms, and Horizon Organic among others — emerged during the subsequent decade.

Picking up that legacy, food businesses were among the first Certified B Corporations since the certification was established in 2006,<sup>35</sup> and now include Greyston Bakery, New Belgium Brewery, Stumptown Coffee Roasters, Danone North America, Back to the Roots, and Ben & Jerry's. As familiar and readily accessible brands, these companies have helped advance the idea of businesses that prioritize the environment, their workers and their communities.

In response to ideals of regenerative agriculture and fishing practices, animal welfare, recyclable and reusable packaging, zero food waste, equitable supply chains and labor practices, new enterprises of all sizes have launched in recent years. The rise of scratch cooking fast casual chains like Sweetgreen, plant-based and synthetic proteins such as Beyond Meat and Impossible Foods, and meal kits Blue Apron are some examples of businesses that have tried to respond to these issues. Others including Revolution Foods and Brigaid, which partner with K-12 school districts provide better school meals, address nutrition and obesity,

are stepping into what have historically been considered government services.

Preceded by craft beer, chocolate, and coffee, small and artisanal food and drink businesses have also launched across the country to offer “better” alternatives in almost every category, from pickles and granola to pasta and liquor. The San Francisco-based Good Food Awards (which has strict triple-bottom line criteria in addition to selecting “superior taste”) has grown to receive over 2,000 entries from “food crafters” across the country.<sup>36</sup> The farm-to table movement has become a mainstream trend, and the number of farmers markets in the U.S. grew from 2,000 in 1994 to over 8,700 in 2019.<sup>37</sup>

As the food movement has grown, organizations including Stone Barns Center for Food and Agriculture,<sup>38</sup> Food Tank,<sup>39</sup> FoodCorps,<sup>40</sup> and Good Food Jobs<sup>41</sup> have emerged to advance grassroots initiatives for a better food system. Environmental nonprofits like the NRDC and the Environmental Working Group (EWG) have started programs related to food systems reform, and universities have created food studies curricula — both looking at the deep interconnections among how food is grown and produced and environmental, social and human health.

Publications focused on a better food system such as *Edible Communities*, *Modern Farmer*, *Civil Eats* and *New Food Economy* have launched, and established news



outlets including *The New York Times* and the *Washington Post* have increased food systems coverage. Along with *Bon Appétit*, and the James Beard Foundation, mainstream media regularly highlights the diverse chefs, entrepreneurs and organizations seeking to make positive change through delicious food. The role of food to strengthen local economies and preserve cultural heritage is being demonstrated more often and in more innovative ways.

## Relevant trends in food, beverage and restaurants

The 10 largest public food companies in the U.S. — Amazon, Walmart, McDonald's, Costco, Starbucks, Mondelez, Target, Kraft Heinz, Sysco, YUM!<sup>42</sup> — are so diverse that a review reveals the dominant trends in today's rapidly changing food sector.

Consolidation characterizes the industry across the board; in particular it has signaled a revolution in where we buy groceries. Walmart is now the biggest grocer in U.S. and groceries represented 55% of all their 2018 U.S. sales in-store and online. Target and Costco are close behind.<sup>43</sup> Public equity analysts agree that in a high volume, low margin grocery industry, Walmart is expected to outperform over the long-term due to e-commerce plus delivery capabilities; Amazon (the second company to ever reach \$1 trillion in market cap) also continues to climb in value. The outlook is more divided among other top grocers: Costco relies

on its membership model as it sells all of its goods at a loss, and neither Kroger nor Sprouts has delivered for investors.<sup>44</sup>

The power of large trusted food brands has diminished enormously as millennials — the largest consumer demographic in America — demand healthy, organic food from small local producers. Diversified food producers (like Kraft Heinz, Mondelez, Nestle) face challenges and, in response, these companies have gone on spending sprees acquiring fast-growing start-up brands.<sup>45</sup> Companies such as J&J Snack Foods, Flowers Foods, Hershey, Mondelez receive top ratings from analysts<sup>46</sup> as they acquire more brands and market share through economies of scale.

The U.S. restaurant industry — spanning fast food, fast casual and full-service — is a mature, highly competitive market. Despite the saturation, several large chains have recently experienced healthy growth<sup>47</sup> mainly driven by rewards/loyalty programs, partnering with food delivery companies, and opening convenient locations.<sup>48</sup> Their rising stock prices reflect the market's optimism over these trends. Projected annual sales in the restaurant industry for 2019 are \$863 billion; 4% of U.S. GDP.<sup>49</sup> Examples include Starbucks (9,000 locations) shifting away from urban centers to drive-thru and delivery capabilities; Dave & Buster's opening 16 new locations in 2019 in their model combining food and entertainment (and utilizing new arcade/VR technology); and Shake Shack which is up to 200 locations (up from 84 in 2016) fueled by



their IPO and growing consumer preference for quality ingredients.<sup>50</sup> Analysts say that the most successful newer restaurant stocks are those that hit on under-served consumer demand at scale, like Chipotle,<sup>51</sup> and recent large private market valuations of chains like Sweetgreen (\$1.6 billion in September 2019)<sup>52</sup> show that investors agree.

On the venture side, Food+Tech Connect's 2018 U.S. Food & Beverage Startup Investment Report<sup>53</sup> found \$1.45 billion invested across 247 food and beverage startup deals in 2018, with dairy and animal-based protein alternatives attracting one-third of that. Plant-based food sales grew 11% last year to \$4.5 billion, five times the growth of the overall food market.<sup>54</sup> UBS forecasts the plant-based meat market will grow by 28% a year and reach \$85 billion by 2030.<sup>55</sup>

Four trends currently shaping the mainstream food industry overall put sustainable food brands in a position to deliver superior financial — plus social and environmental — returns for impact investors:

**Transparency and authenticity:** Consumers place increasingly high value on knowing where their food comes from, its journey to their plate, and the welfare of land, waters, farmers and animals behind it all. 60% of all US consumers say it is important that the food they purchase is produced in a sustainable way, up from 50% in 2017.<sup>56</sup> 51% are more likely to visit a restaurant that

offers environmentally friendly food items.<sup>57</sup> The concern for where food comes from is also an opportunity for the celebration of diverse cultures, with preference for global flavors and global cuisine on the rise. Authentic representations of heritage and tradition resonate in the market, while perceived cultural appropriators are punished.

**Desire for new, delicious foods:** There has been a rise of food media and entertainment taking viewers on a journey to far away countries and new neighborhoods. TV shows like Anthony Bourdain's *Parts Unknown* and viral videos from *Bon Appétit* have contributed to a ubiquitous "foodie" culture. As a result, consumers demonstrate a willingness to try new things: goat milk, dairy free yogurt, plant-based meats, cauliflower dough pizza. There is a growing obsession with deliciousness and the search for your city's best ice cream/pho/fried chicken/tacos/grilled cheese. As a result, craft products like beer, cheese, baked goods, condiments, and meats continue to be on the rise.<sup>58</sup> Craft breweries (approximately 7,000) in the U.S. are at an all-time high, and are being credited for reviving economically declining towns and playing a role in the revival of local foods.<sup>59</sup>

**Demand for unique food experiences:** The desire for new foods crosses over to new food-related experiences, like gourmet



food trucks, pop-up restaurants, and cooking classes as team bonding. Eaters are connecting with their community through their food, and increasing globalization means more cuisines are available than ever before. 45% of diners go out to eat multiple times a week; another 20% going out to eat once a week.<sup>60</sup> Gathering places like craft breweries, coffee shops, and food halls serve as an antidote to digital social lives. 78% of millennials say they would rather spend money on an experience, such as a restaurant or other activity, compared to purchasing an item from a store.<sup>61</sup>

**Customer convenience:** The consumer food sector in the U.S. has been marked by rapid technology transformations in recent years including e-commerce<sup>62</sup> and efficiencies in fulfillment, delivery, and customization. This goes beyond grocery shopping: meal kit companies make home-cooked family meals possible in a fraction of the time with customized services catering to different tastes, dietary needs, and preferences. Independent restaurants compete with chains by using partners like GrubHub to fulfill delivery orders.

## Challenges to scaling sustainable food

Lack of information, policies favoring big agriculture, and on-line shopping habits pose challenges to scaling sustainable food. The role creatives play in informing and educating

consumers, and shaping tastes and habits, can help address these issues.

**Lack of clear labeling:** There are limited regulations placed on food labeling. “Certified Organic” is one of the only terms used to market food that has a clear legal definition — and even that certification has been expanded, watered down, and appropriated by conventional agriculture. Since there is no effective regulatory oversight, it is difficult to effectively communicate to consumers that all natural, healthy, local, grass-fed, and similar labels make unsubstantiated implicit or explicit health and environmental claims. As a result, consumers struggle to clearly differentiate sustainably raised/produced food and value-added products that have particular health or environmental virtues from conventional food or unhealthy food-like products promoted with confusing terms and well-funded marketing pitches.

**Unfavorable public policy environment:** The playing field is highly biased against the production of unique, regional products and specialty crops. Therefore, establishing competitive prices for good food grown well remains a challenge. Policies, subsidies, and long-standing governmental and market-based systems favor what is typically described as “Big Ag(riculture),” resulting in large-scale, extractive, chemically based agricultural practices to produce inexpensive fats, sugar, and meat. There is





no such support for farmers growing fruits and vegetables, organic or sustainably raised livestock, or small-scale localized production of value-added farm products. Less than 1% of farm subsidies support the kinds of regionally specialized ingredients that are used in food products that celebrate culturally diverse food traditions.

### **Environmental impact of on-line shopping:**

As consumer demand for new, delicious food coupled with convenience increases, food purveyors will need to address the inherent tension in shopping online for products intended to be sustainable. Direct-to-consumer delivery creates significant environmental impacts due to packaging, transportation and fossil fuel consumption.

## **Impact investing in sustainable food**

Impact investors are already well-attuned to opportunities in the large food and agriculture sector. According to the Global Impact Investing Network's most recent survey of impact investors,<sup>63</sup> 10% of all respondents' assets under management are in Food & Agriculture, with 58% of respondents allocating capital to the sector, making it the most common area for investment. Toniic's *Powered Ascent 2018: Insights from the frontier of impact investing* reported 6% of Toniic members allocated impact capital aligned with UN Sustainable Development Goal 2: to end hunger; improve nutrition; promote sustainable agriculture.<sup>64</sup>

Trillium Asset Management's Framework<sup>65</sup> maps out how impact investors break down opportunities in sustainable food: sustainable production; sustainable consumption; sustainable agricultural technology; conservation and climate change; and social equity and sustainable livelihoods.<sup>66</sup> This reveals an unrealized opportunity for the food products and experiences that bring sustainable, ethically-sourced food to our plates, and educate eaters about the implications of the choices they make.

Plant-based meat alternatives, consumer packaged goods brands, and restaurants are growing in popularity among investors, including impact investors. For example, Impossible Foods raised more than \$750 million — from investors ranging from the sovereign wealth fund of Singapore to Katy Perry — at an approximate \$2 billion valuation at most recent close in May 2019.<sup>67</sup> Healthy fast-casual chain Everytable — which uses a sliding-scale pricing model<sup>68</sup> that lets restaurants in low-income neighborhoods charge less than ones in high-income neighborhoods — raised \$5.3 million from Kimbal Musk, Acumen and TOMS Social Enterprise.<sup>69</sup> And impact investors including donor advised fund sponsor Impact Assets benefited from Beyond Meat's successful IPO which resulted in a more than \$9.2 billion valuation. Plant-based egg alternative JUST employs innovative design and branding to help their impact brand go mainstream and counts Khosla Ventures and Radicle Impact as



investors. S2G invested in Ripple Foods (pea-based milk), which leverages its intellectual property, proprietary technology, and impact-forward design and branding efforts to bring consumer awareness to issues like the carbon, water and plastic saved by using their product.<sup>70</sup>

Tanka is a native-owned meat protein bar based on traditional first nations *wasna* recipe, using food as a vehicle to bring new life and awareness of Oglala Lakota cultural heritage to the wider market.<sup>71</sup>

Upstart Co-Lab's recent landscape analysis of 100 impact funds investing in the creative economy revealed that sustainable food is the category with the most activity, with 49% of funds analyzed active in the sector. These funds, which represent an estimated \$9.8 billion, include RSF Social Finance Food Systems Transformation Fund,<sup>72</sup> New Crop Capital,<sup>73</sup> Radicle Impact,<sup>74</sup> and PowerPlant Ventures.<sup>75</sup>

Upstart's analysis of more than 125 creative economy companies and funds raising impact capital today includes 16 sustainable food examples collectively raising more than \$278 million. Examples include Greenbelt Hospitality, a community-oriented farm-to-table restaurant founded by artist Matthew Moore which is currently taking root in Los Olivos Park in Phoenix; and Coastal Enterprises, just one of many community development finance institutions lending to food businesses in their region.

The 208 U.S. B Corporations in sustainable

food represent more than 17% of all 1,200 B-certified companies domestically,<sup>76</sup> and include Bigelow Tea, Sir Kensington's, Stonyfield Farm, Luke's Lobster, Drive Change, Ox Verte, and artist-founded Jeni's Splendid Ice Cream. (See Appendix B for other examples of emerging companies.)

Building the field are startup accelerators preparing sustainable food entrepreneurs to attract impact capital. Food System 6 is a one-year program for sustainable food and agriculture entrepreneurs in San Francisco;<sup>77</sup> FoodFutureCo is a scale-up accelerator whose focus areas include local food, plant-based food, sustainable seafood, and food waste;<sup>78</sup> Social Enterprise Greenhouse Food Accelerator is a hub for food innovators in Providence, RI;<sup>79</sup> and Good Food Accelerator in Chicago, the nation's first accelerator focused on building supply chains for sustainable local food.<sup>80</sup>

Impact-driven angel networks are pooling resources to seed innovative food businesses — including SLoFIG (Sustainable Local Food Investment Group) investing in Chicago's food shed,<sup>81</sup> and Foodshed Investors, an Austin-based group of investors at the intersection of food, finance and social good.<sup>82</sup> (See Appendix D for more Funds, Accelerators and Angel Networks.)

## Measuring the impact of sustainable food

The creative economy engages the food



ecosystem where the milk becomes the cheese: where the raw products are transformed, value is added, and the results are presented engagingly and deliciously, and in community. Ultimately food products and food experiences have the potential to change consumer behavior and trigger action, ensuring there is strong demand for the sustainable food and agriculture ecosystem. But this means measuring the environmental and social impact of food products, brands, restaurants, hospitality companies, food service providers, and others is a layered process.

Does the food experience advance heritage & culture or community-building among participants? Does the food product contribute to environmental sustainability through education and activation of consumers? Are the farm and food industry workers producing and preparing these foods treated well? Is planetary health maintained through the growing, farming, fishing, production, and preparation of these foods?

Measuring the impact of food products and experiences sits adjacent to how impact is measured for the vast sustainable food and agriculture ecosystem, and will necessarily lead to some new ways to assess impact. Fair Trade certification for coffee, chocolate, and other food products has been the most prevalent metric for craft and artisanal food products applied by impact investors. Fair Trade certification ensures fairness at all points in the supply chain.<sup>83</sup> Certification

focuses on farmers receiving a fair price for their products, environmental and community benefits related to the farming and processing of those productions, and best practices for workers' rights, environment and community development. But the certification stops short of measuring uniqueness, deliciousness, tradition or artistry.

Uniqueness, deliciousness, tradition and artistry are exactly what is measured by standards for food products following specific preparation methods and specific to discrete bioregions which have existed for many years. Labeling and legal requirements are intended to protect the unique value of regional products, and set customer's expectations for quality, consistency, and tradition. These standards help create economic value for artisanal products using traditional place-based methods of production honed over generations. Standards like these — when coupled with concepts of Fair Trade, organic, sustainable — can begin to capture the whole power of food products and brands to engage, educate and spur eaters to ethical action.

For example, European law protects Italy's famed Parmigiano Reggiano cheese by limiting specific production to traditional areas in the provinces of Parma, Reggio Emilia, Bologna, Modena and Mantua. Under European Union law, only cheese produced by a certain method in these provinces may be labeled Parmigiano-Reggiano.



Rating food experiences has mainly been the purview of restaurant critics and lifestyle feature writers. But the growth of food with a focus on authenticity and regional relevance suggests there are new measures coming. For example, in 2003, Claus Meyer and Rene Redzepi opened the restaurant Noma in Copenhagen creating a multi-sensory dining experience and global sensation that uncovered and celebrated elements of local history and culture. This restaurant quickly became the standard for food experiences that celebrate place, elevate local cuisine, and embrace traditions and regional distinction. The Noma phenomena invigorated a discussion which resulted in the creation of an international standard for new Nordic cuisine.

In 2005, the Nordic Council's agricultural and food ministers from Denmark, Finland, Iceland, Norway, and Sweden launched the new Nordic Food Program defining "local." The Council also provided more than 3 million Euros to support development of food-related products and business that met standards for the new Nordic Environmental Sustainability. Establishing a legal framework and cogent definition for regional cuisine added value and cachet to an emergent eating experience and previously unrecognized and under-appreciated regional cuisine.

Other restaurants have started to promote environmental sustainability as part of their brand, providing a clear example of the food experience educating eaters about bigger

issues. In San Francisco, The Perennial, a restaurant dedicated to addressing climate change through delicious food (which operated from 2016-2019) set up its own aquaponic farm, used energy efficient appliances, recycled materials, baked with the only perennial grain on the market (Kernza), and purchased meat from carbon-friendly ranches. Founders Karen Leibowitz and Anthony Myint also launched the Perennial Farming Initiative, a non-profit dedicated to creating a renewable food system through Zero Footprint carbon neutral restaurants, by providing sustainability information for chefs like a Healthy Soil Guide, and with advocacy efforts like Restore California focused on restaurants, farmers and diners.<sup>84</sup>

## Conclusion

Understanding the power of food products and experiences will continue to evolve as customers demand and pay a premium to eat in a way that reflects their values from farm to fork and sea to spoon. There is opportunity for metrics to evolve, assigning even more measurable value to products and experiences that foster a diverse, culturally authentic, equitable, and sustainable economy.

What's clear now, however, is that impact investors who care about shaping a creative economy in these ways will find numerous opportunities to deploy their values-aligned capital in food across industry category (eg. food waste reduction, dining, consumer packed



goods) and impact area (eg. environment, labor rights, cultural heritage).

Creatives — whether they're chefs, artisanal food and drink makers, or entrepreneurs — have been essential in captivating and educating consumers around social, economic, and environmental issues for decades. This will continue, making it possible for consumers to act on their values without sacrificing pleasure.



## Appendix A: Sustainable Food Organizations

<b>Chefs Collaborative</b>	<i>National nonprofit network with a mission to inspire, educate, and celebrate chefs and food professionals building a better food system</i>
<b>The Climate Collaborative</b>	<i>Manufacturers, retailers, distributors, brokers, suppliers and other concerned businesses from the natural foods industry working collaboratively to take bold action to reverse climate change</i>
<b>Coalition of Immokalee Workers</b>	<i>Worker-based human rights organization internationally recognized for its achievements in fighting human trafficking and gender-based violence at work</i>
<b>Culinary Breeding Network</b>	<i>Nonprofit building communities of plant breeders, seed growers, farmers, produce buyers, chefs and other stakeholders to improve quality in vegetables and grains</i>
<b>Equal Exchange</b>	<i>For-profit, Fairtrade, worker-owned cooperative headquartered in West Bridgewater, MA</i>
<b>Fairtrade America</b>	<i>The U.S. arm of Fairtrade International working to promote fair trade and ethical consumption in the US market</i>
<b>Farm Labor</b>	<i>FLOC represents thousands of seasonal farm workers, advocating for better working conditions and wages</i>
<b>Fields Oceans Ranches Kitchens Steward (FORKS)</b>	<i>Sponsored by the nonprofit Seattle Good Business Network, this volunteer organization engages chefs in promoting local and sustainable food purchasing</i>
<b>Food Chain Workers Alliance</b>	<i>Nonprofit uniting 31 organizations involved in the food system, working to improve wages and working conditions for their over 340,000 workers</i>
<b>Food Policy Action</b>	<i>Nonprofit whose goal is to change the national dialogue on food policy by educating the public on how elected officials are voting on these issues</i>
<b>Food Recovery Network</b>	<i>Nonprofit empowering students, communities, and food businesses to reconstruct their perceptions and habits around surplus food</i>
<b>Food Rescue Locator</b>	<i>Director of organizations in the United States that rescue, clean, transport, prepare, and distribute food to the those in need in their communities</i>
<b>Food Tank</b>	<i>Nonprofit food think tank focused on building a global community for safe, healthy, nourished eaters</i>
<b>Global Alliance for the Future of Food (GAFF)</b>	<i>Collaboration of over 20 philanthropic foundations that envisions healthy, equitable, renewable, resilient, and culturally diverse food and agricultural systems</i>
<b>Good Food Foundation</b>	<i>Organization celebrating taste-making crafters at the vanguard of deliciousness and social and environmental excellence</i>



## Appendix A continued

<b>GrowNYC</b>	<i>New York City nonprofit providing free tools and services for New Yorkers to help improve access to fresh, healthy local food</i>
<b>The Happy Org</b>	<i>Happy Active Positive Purposeful Youth is a youth-led organization that addresses the physical, mental, emotional, and social health issues faced today</i>
<b>Hungry Harvest</b>	<i>Fights food waste by connecting customers with surplus fruits and vegetables that would otherwise go to landfills</i>
<b>Hot Bread Kitchen</b>	<i>New York City nonprofit social enterprise that creates economic opportunity through careers in food</i>
<b>James Beard Foundation (JBF)</b>	<i>JBF's mission is to preserve, nurture, and celebrate the diverse culinary heritage of the U.S.</i>
<b>The Perennial Farming Initiative</b>	<i>Nonprofit organization dedicated to building a renewable food system rooted in healthy soil</i>
<b>Readers to Eaters</b>	<i>Publisher working toward food literacy among children and families</i>
<b>ReFED</b>	<i>Data-driven guide for businesses, government, funders, and nonprofits to collectively reduce food waste at scale</i>
<b>Refresh Working Group</b>	<i>Research collaboration made up of over 30 farmers, small business owners, researchers, corporate partners, nonprofit leaders, educators, community organizers, and innovators working across the food system to examine the intersection of technological innovation and food</i>
<b>Restaurant Opportunities Centers United</b>	<i>Works to raise restaurant industry standards for working conditions, wages, and employee treatment.</i>
<b>Slow Food USA</b>	<i>Part of the global Slow Food network spreading a mission of good, clean, and fair food for all to over 100,000 members in more than 150 countries</i>
<b>Small Planet Foundation</b>	<i>Provides grants to visionary social movements and grassroots organizations working to transform the global food system</i>
<b>Stone Barns Center for Food and Agriculture</b>	<i>Nonprofit farm and educational center in New York focused on fostering young farmers; Blue Hill at Stone Barns is their partner restaurant</i>
<b>Southern Foodways Alliance</b>	<i>An institute of the Center for the Study of Southern Culture at the University of Mississippi, dedicated to the documentation, study and exploration of the foodways of the American South</i>



## Appendix B: Reports and Articles on the Impact of the Food Industry

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### **2019 Restaurant Success Report**, Toast, July 2019

*Industry report from restaurant software company Toast reporting data around restaurant best practices and diner preferences*

[www.pos.toasttab.com/resources/restaurant-success-industry-report](http://www.pos.toasttab.com/resources/restaurant-success-industry-report)

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### Andrea Strong, **Fancy Snacks Are Having a Moment. Venture Capital Wants In.** Eater, September 2019.

*Article that chronicles investor interest in the rise of value-added artisanal snack products*

[www.eater.com/2017/9/6/16230534/artisan-food-funding-financing-venture-capital](http://www.eater.com/2017/9/6/16230534/artisan-food-funding-financing-venture-capital)

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### **Artisanal Trend Fuels Ingredient Innovation**, The Ingredients Network, September 2018

*Article outlining the rise of craft and artisanal food and drink launches, with suppliers responding by investing in authentic, clean label ingredients*

[www.ingredientsnetwork.com/artisanal-trend-fuels-ingredient-innovation-news074695.html](http://www.ingredientsnetwork.com/artisanal-trend-fuels-ingredient-innovation-news074695.html)

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### Boston Consulting Group, **Tackling the \$1.6 Billion Food Loss and Waste Crisis.** August 2018

*BCG argues that there is \$700 of business opportunity embedded in solving the food waste challenge.*

[www.bcg.com/en-us/publications/2018/tackling-1.6-billion-ton-food-loss-and-waste-crisis.aspx](http://www.bcg.com/en-us/publications/2018/tackling-1.6-billion-ton-food-loss-and-waste-crisis.aspx)

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### Food + Tech's **2018 U.S. Food & Beverage Startup Investment Report**, June 2019

*Annual report examining U.S. based food and beverage investor trends, including a detailed overview of notable exits and investments.*

[www.foodtechconnect.com/2019/06/06/2018-u-s-food-beverage-startup-investment-report/](http://www.foodtechconnect.com/2019/06/06/2018-u-s-food-beverage-startup-investment-report/)

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### John Eligon and Julia Moskin, **16 Black Chefs Changing Food In America**, New York Times, July 2019

*Editorial about chefs changing the culinary landscape through celebrating heritage and being the architects of a food future and culture that pushes past the Eurocentric traditions taught in culinary schools*

[www.nytimes.com/interactive/2019/07/16/dining/black-chefs-restaurants-food.html](http://www.nytimes.com/interactive/2019/07/16/dining/black-chefs-restaurants-food.html)

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### Kristin Lang, Joshua Humphreys, and Andreea Rodinciuc, **Impact Investing in Sustainable Food and Agriculture across Asset Classes: Financing Resilient Value Chains through Total Portfolio Activation**, Trillium Asset Management, May 2017

*A framework from leading impact investment firm for investors to invest in sustainable food systems across asset classes such as cash, public equities, and fixed income, as well as alternative asset classes such as private equity, venture capital, and real assets in sustainable farmland and timberland.*

[www.trilliuminvest.com/wp-content/uploads/2017/05/Investing-in-Sustainable-Food-and-Agriculture.pdf](http://www.trilliuminvest.com/wp-content/uploads/2017/05/Investing-in-Sustainable-Food-and-Agriculture.pdf)

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## Appendix B continued

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Natural Marketing Institute, **Understanding the LOHAS Market Report**, March 2008

*A landmark demographic marketing segment and marketing report which highlights market trends and size for healthy food, beverage, and organic foods; it details market size and shape and is a good indicator for the development of craft food markets*

[www.lohas.se/wp-content/uploads/2015/07/Understanding-the-LOHAS-Consumer-11\\_LOHAS\\_Whole\\_Foods\\_Version.pdf](http://www.lohas.se/wp-content/uploads/2015/07/Understanding-the-LOHAS-Consumer-11_LOHAS_Whole_Foods_Version.pdf)

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National Academies Press, **A Framework for Assessing the Effects of the Foodsystem**, June 2017

*Analysis of food's impact on health, environment, climate, economic inequality.*

[www.ncbi.nlm.nih.gov/books/NBK305181/](http://www.ncbi.nlm.nih.gov/books/NBK305181/)

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National Restaurant Association, **2019 Restaurant Industry Factbook**

*Fact sheet of key stats in the U.S. restaurant industry around employment, consumer trends and economic impact*

[www.restaurant.org/Downloads/PDFs/Research/SOI/restaurant\\_industry\\_fact\\_sheet\\_2019.pdf](http://www.restaurant.org/Downloads/PDFs/Research/SOI/restaurant_industry_fact_sheet_2019.pdf)

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### Nourish Food System Map

*Infographic mapping circular food system inputs and impacts designed by Nourish, an educational initiative from WorldLink*

[www.nourishlife.org/pdf/Nourish\\_Food\\_System\\_Map\\_18x24.pdf](http://www.nourishlife.org/pdf/Nourish_Food_System_Map_18x24.pdf)

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Scheherazade Daneshkhu, **Consumer Goods: Big Brands Battle “Little Guys,”** Financial Times, February 2018

*Article covering the rise of artisanal and craft foods and consumer package goods companies' interest in acquiring craft brands*

[www.ft.com/content/4aa58b22-1a81-11e8-aaca-4574d7dabfb6](http://www.ft.com/content/4aa58b22-1a81-11e8-aaca-4574d7dabfb6)

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Stephanie Strom, **Small Food Brands Big Successes**, New York Times, August 14, 2015

*Strom writes about the emergence and market power of small food brands, reporting craft and artisanal food and drink launches have seen a global CAGR of 28% over the past 5 years*

[www.nytimes.com/2015/08/26/dining/start-up-food-business-changing-appetites.html](http://www.nytimes.com/2015/08/26/dining/start-up-food-business-changing-appetites.html)

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## Appendix C: Sustainable Food Investment Funds, Accelerators, Investor Networks

<b>Accelerating Appalachia</b>	<i>World's first nature-based business accelerator focusing on high-impact seed stage businesses in sectors including food, craft beverage, forest products, and soil and water health innovations</i>
<b>AccelFoods</b>	<i>VC fund focused on high growth packaged food and beverage companies</i>
<b>AgFunder</b>	<i>VC platform investing in technologies to rapidly transform our food and agriculture system; one of the most active agri-foodtech venture capitalists</i>
<b>Anterra Capital</b>	<i>VC fund investing in companies that are transforming the safety, security and sustainability of global food</i>
<b>Armonia</b>	<i>Fund investing since 2007 in sustainable and regenerative companies; also a pioneer investor in B Lab and founding member of the GIIN</i>
<b>Austin Foodshed Investors</b>	<i>Mission-driven investment firm local "good food" ecosystems by playing in the intersection of food, finance, and social good</i>
<b>Better Food Ventures</b>	<i>Exclusively invests in entrepreneurs that are leveraging IT to transform the food and ag sector</i>
<b>BIGR Ventures</b>	<i>Boulder, CO- based growth equity fund providing value-added, strategic partnership and capital to promising early-stage natural and organic products</i>
<b>Boulder Food Group</b>	<i>VC firm focusing on early stage organic, non-GMO, healthy food and beverage consumer product companies</i>
<b>Branchfood</b>	<i>Largest community of food innovators in New England; provides resources to founders launching and scaling transformative food-related businesses including co-working space, events, workshops, and mentorship</i>
<b>Cascadia Foodshed Funding Project</b>	<i>Collaboration of foundations, investors and NGOs targeting five impact areas: health, social equity, family wage job creation and preservation, rural community resilience, and ability to influence policy</i>
<b>Colorado Food</b>	<i>Supports a vibrant and healthy local food system by making small loans to farmers, producers, and food system entrepreneurs in Colorado who do not have access to traditional sources of growth capital; invests in sustainable food products and the communities that create and consume them</i>
<b>Fair Food Fund</b>	<i>Impact investing arm of Fair Food Network; investing in early stage entrepreneurs growing community "health and wealth"; focus areas: improving healthy food access, supporting American farmers, igniting local economies, and opening opportunities for more people in more places</i>



## Appendix C continued

<b>Food Angels</b>	<i>Professional angel network of independent individuals with knowledge and expertise in food entrepreneurship</i>
<b>Food Foundry</b>	<i>Chicago-based growth accelerator program by Relish Works; supports, connects, and propels innovative startups who are reimagining the food industry with focus on vendors, distributors, and operators</i>
<b>Food Hatch</b>	<i>Food focused accelerator providing seed and early stage funding and connections to senior executives and successful entrepreneurs in the food industry</i>
<b>Food System 6</b>	<i>Accelerator building a more equitable and sustainable food and agriculture system by supporting entrepreneurs focused on health, sustainability, and justice</i>
<b>Food-X</b>	<i>A top food innovation accelerator out of SOSV; focus on innovations in food system; promoting health and sustainability; providing delicious, healthy, affordable, convenient food</i>
<b>FoodBytes!</b>	<i>A series of transformational events from Rabobank in the food, agribusiness, and technology space; designed to connect food industry leaders and investors with startup companies that are innovating and disrupting the food chain with groundbreaking ideas in food, agribusiness and technology</i>
<b>FoodFutureCo</b>	<i>Accelerator for established yet small organizations providing unique products and solutions across our food system; focus areas include: consumer products, local food, plant-based food, sustainable seafood, ag tech, food tech and food waste</i>
<b>Foodshot Global</b>	<i>Coalition of mission-aligned capital providers including Rockefeller Foundation and Generation Investment Management</i>
<b>Greenmont Capital Partners</b>	<i>Impact investments in high growth consumer products since 2004, based in Boulder, CO. In 2008, Greenmont II became a GIIRS Pioneer Fund</i>
<b>InvestEco Sustainable Food Fund</b>	<i>Impact investment fund focused on high growth North American companies that promote health and sustainability in the food &amp; agricultural sector</i>
<b>New Crop Capital</b>	<i>Specialized venture fund investing in companies developing meat, dairy, eggs and seafood with plant-based ingredients or through cellular agriculture, as well as companies that promote and distribute these products</i>
<b>PowerPlant Ventures</b>	<i>Growth equity fund investing in emerging consumer food, beverage, and foodservice companies with focus on plant-centric brands</i>
<b>Rural America Fund</b>	<i>Chicago-based private equity firm targeting the agribusiness market; makes partnership investments in growing, lower middle-market operating businesses principally in agriculture or ag-related industries</i>



## Appendix C continued

<b>S2G Ventures</b>	<i>Multi-stage healthy and sustainable food and agriculture venture fund</i>
<b>SKU</b>	<i>14-week accelerator for CPG companies</i>
<b>Sustainable Local Food Investment Group (SLoFIG)</b>	<i>Network of accredited independent investors who share the mission of using private investment to re-establish a robust and sustainable food system across the Chicago foodshed</i>
<b>Social Enterprise Greenhouse Food Accelerator</b>	<i>Provides social entrepreneurs with tools, networks and resources along health &amp; wellness, food, and impact tracks</i>
<b>Terra Accelerator</b>	<i>Food and Ag tech accelerator from Rabobank and RocketSpace</i>
<b>Union Kitchen Food Accelerator</b>	<i>Washington DC-based food business accelerator building successful businesses that launch locally, grow regionally, and scale nationally</i>
<b>Village Capital</b>	<i>Investment firm focused on access to opportunity for all communities (supporting ventures in health, education, and financial inclusion) and resource sustainability of the planet (supporting ventures in energy and agriculture)</i>

Many corporations administer their own food incubator/accelerator programs and venture funds. Examples include: 301 Inc (General Mills), 7-Ventures (7-11), Acre Venture Partners (Campbell Soup), Canvas Food + Drink Lab (Marriott), Chobani Incubator, Eighteen94 Capital (Kellogg's), Tin Shed Ventures (Patagonia), Tyson New Ventures, Unilever Ventures, VEB Venture & Emerging Brands (Coca Cola), WeWork Food Labs Accelerator



## Appendix D: Representative Sustainable Food Businesses

<b>Back to the Roots</b>	<i>Indoor garden kit and organic cereal maker whose products are in public school cafeterias across the country</i>
<b>Basbaas Sauce</b>	<i>Brooklyn-based, woman owned Somali hot sauce company</i>
<b>Bavette</b>	<i>Milwaukee, WI based woman owned butcher shop and restaurant serving local, sustainable meats and charcuterie</i>
<b>Benne on Eagle</b>	<i>Asheville, NC based restaurant paying homage to the Appalachian African-American culinary traditions</i>
<b>Burlap and Barrel</b>	<i>Direct trade, single origin, hand-harvested spices from around the world</i>
<b>Brigaid</b>	<i>K-12 school cafeteria chef-training program founded by former Noma head chef Dan Giusti</i>
<b>Brightland Olive Oil</b>	<i>Single-estate California olive oils; their farm partner is committed to organic practices and uses zero pesticides</i>
<b>Brooklyn Delhi</b>	<i>Condiments and sauces inspired by Indian culinary traditions</i>
<b>California Olive Ranch</b>	<i>Vertically integrated olive oil company using sustainable methods to make award winning, top quality oils</i>
<b>Diaspora Co.</b>	<i>Single origin, direct trade Indian spice purveyor</i>
<b>Dig (formerly Dig Inn)</b>	<i>Fast casual farm to table chain with its own farm in New York State</i>
<b>Dripkit</b>	<i>Pour-over instant coffee with biodegradable filter</i>
<b>Dock to Dish</b>	<i>International network of small-scale fishermen who pioneered the restaurant supported fishery model</i>
<b>Eat Offbeat</b>	<i>New York catering company employing refugees as chefs; chefs make signature dishes from their home countries for the catering menu</i>
<b>EatsPlace</b>	<i>EatsPlace is a neighborhood restaurant and bar that's a food incubator and restaurant accelerator</i>
<b>Everytable</b>	<i>Healthy fast food chain in LA serving low-income neighborhoods</i>
<b>Farm &amp; Sparrow</b>	<i>Mars Hill, NC mill dedicated to expressing the regional terroir of American landrace grains and legumes.</i>
<b>FoodtoEat</b>	<i>Woman-owned corporate catering concierge service that focuses on working with immigrant, women and minority-run food businesses throughout New York City</i>



## Appendix D continued

<b>Greyston Bakery</b>	<i>Yonkers, NY based bakery whose profits are directed back to the community via a foundation; also practice open hiring, which allows anyone to sign up regardless of background</i>
<b>Jeni's Splendid Ice Cream</b>	<i>Award winning Columbus, OH Certified B-Corp ice cream company using direct trade and fair trade ingredients</i>
<b>Left Bank</b>	<i>Saxapahaw, NC based butcher and charcuterie shop using sustainable meats</i>
<b>Mermaid's Garden</b>	<i>Sustainable seafood shop and community supported fishery share in Brooklyn, NY</i>
<b>Ocean Hugger</b>	<i>Plant-based protein alternative sushi/sashimi (made from ingredients such as tomato, eggplant) from Master Chef James Corwell</i>
<b>Pineapple Collaborative</b>	<i>Lifestyle and event brand for women who love food</i>
<b>Proud Pour</b>	<i>Wine and cider maker whose sales directly benefit environmental causes including oyster habitat restoration</i>
<b>Rancho Gordo</b>	<i>Napa County, CA based specialty producer and seller of heirloom beans</i>
<b>Red Bay Coffee Roasters</b>	<i>Ensures their coffee production is not only high quality and sustainable, but a vehicle for diversity, inclusion, social and economic restoration, and entrepreneurship</i>
<b>Revolution Foods</b>	<i>Certified B-Corporation helping schools serve compliant, delicious meals</i>
<b>Seylou Bakery</b>	<i>Washington DC bakery that partners with farmers for specific grains, which are milled on site and baked into 100% whole grain breads in a wood-fired oven</i>
<b>Spare Food Co.</b>	<i>Co-founded by former Blue Hill culinary director Adam Kaye, a food waste business using culinary innovation to create new products and processes that help design waste out of the food system</i>
<b>Tanka</b>	<i>Native-owned, Kyle, SD-based bison bar makers who base their recipe on Lakota food traditions</i>
<b>Teatuila</b>	<i>Denver, CO-based B-Corp single garden direct tea company that owns its own regeneratively farmed tea garden</i>
<b>Teranga</b>	<i>West African inspired, Harlem, NY fast casual restaurant inside The Africa Center making dishes inspired by traditional home cooking</i>
<b>The Meat Hook</b>	<i>Brooklyn, NY based whole animal butcher shop, restaurant, and sausage company sourcing sustainable meats</i>
<b>Toast Ale</b>	<i>Award winning beer brewed with surplus bread; 100% of profits go to charity</i>



## Appendix E: Sustainable Food Measures and Standards

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The **American Cheese Society Competition** ([www.cheesesociety.org/competition](http://www.cheesesociety.org/competition)) is the largest judging of American-made cheeses.

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The **America Grassfed Association** ([www.americangrassfed.org/become-a-certified-producer](http://www.americangrassfed.org/become-a-certified-producer)) certification program recognizes livestock producers that raise animals on pasture and use grassfed-finishing methods.

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**Animal Welfare Approved** ([www.agreenerworld.org/certifications/animal-welfare-approved](http://www.agreenerworld.org/certifications/animal-welfare-approved)) sets standards for human treatment of all species of animals and provides certification.

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The **Brewers Association's Craft Beer Seal** ([www.brewersassociation.org/independent-craft-brewer-seal](http://www.brewersassociation.org/independent-craft-brewer-seal)) is dedicated to promoting and protecting America's small independent craft brewers.

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**Demeter Symbol** ([www.demeter-usa.org/about-demeter/biodynamic-certification-marks.asp](http://www.demeter-usa.org/about-demeter/biodynamic-certification-marks.asp)) recognizes production based in biodynamic agricultural methods.

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**Fair Trade Certification** ([www.fairtradecertified.org](http://www.fairtradecertified.org)) For coffee, tea, chocolate, cacao, mangoes, bananas, grapes, apples: third party certification process that evaluates farmer working conditions, access to capital and sustainable agricultural practices.

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**Global Animal Partnership** ([www.globalanimalpartnership.org](http://www.globalanimalpartnership.org)) partners with Whole Foods and Amazon on a 5-point rating system.

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**The Good Food Awards** ([www.goodfoodfdn.org](http://www.goodfoodfdn.org)) recognizes food purveyors and products that use responsible practices and who celebrate craftsmanship and flavor.

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**The James Beard Awards** ([www.jamesbeard.org/awards](http://www.jamesbeard.org/awards)) offer awards in a variety of food industry categories. Recognizes best chefs and restaurants in the United States.

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The **Menus of Change Initiative** ([www.menusofchange.org](http://www.menusofchange.org)) co-founded by the Culinary Institute of America and the Harvard School of Public Health, recognizes institutions that serve healthy, sustainable, and delicious food.

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**Michelin Guide** ([www.guide.michelin.com/us](http://www.guide.michelin.com/us)) is a rating system to grade restaurants on their quality.

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**Monterey Bay Aquarium Seafood Watch** ([www.seafoodwatch.org](http://www.seafoodwatch.org)) is a list of fish species that helps consumers and businesses make healthy choices for oceans.

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**The Non-GMO Project** ([www.nongmoproject.org](http://www.nongmoproject.org)) is advocating for transparency around products that are GMO-based.

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**OneHealthAg** ([www.onehealthag.com](http://www.onehealthag.com)) aims to help producers and consumers raise and sell meat that aligns with social and environmental values.

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## Appendix E continued

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**Organic and Biodynamic Wines** are made without the use of artificial pesticides, fungicides and herbicides according to rules established by organizations like the U.K.'s Soil Association ([www.soilassociation.org/our-standards/what-are-organic-standards](http://www.soilassociation.org/our-standards/what-are-organic-standards)).

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**Refed** is a non-profit dedicated to eliminating food waste. Refed tracks progress against 27 solutions to food waste: ([www.refed.com/analysis?sort=economic-value-per-ton](http://www.refed.com/analysis?sort=economic-value-per-ton)).

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**USDA Certified Organic** ([www.usda.gov/topics/organic](http://www.usda.gov/topics/organic)): An agricultural product or food grown using methods approved by the U.S. department of agriculture.

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**World 50** ([www.theworlds50best.com](http://www.theworlds50best.com)) is a list of the world's 50 best restaurants sponsored by San Pellegrino.

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**ZeroFoodPrint** ([www.zerofoodprint.org](http://www.zerofoodprint.org)) is an organization recognizing or organizing restaurants that are taking direct action to address the climate crisis.

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## Endnotes

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- 26 [www.michaelpollan.com/books/in-defense-of-food/](http://www.michaelpollan.com/books/in-defense-of-food/)
- 27 [www.nrdc.org/issues/food-waste](http://www.nrdc.org/issues/food-waste)
- 28 [www.foodtank.com/news/2019/09/new-bill-to-reduce-food-waste-enters-congress/](http://www.foodtank.com/news/2019/09/new-bill-to-reduce-food-waste-enters-congress/)
- 29 [www.ufw.org/about-us/our-vision/](http://www.ufw.org/about-us/our-vision/)
- 30 [www.hwfto.com/about-us/history-wfto/history-fair-trade](http://www.hwfto.com/about-us/history-wfto/history-fair-trade)
- 31 [www.ciw-online.org/about/](http://www.ciw-online.org/about/)
- 32 [www.ciw-online.org/about/](http://www.ciw-online.org/about/)
- 33 [www.fightfor15.org/about-us/](http://www.fightfor15.org/about-us/)
- 34 [www.slowfood.com/filemanager/Convivium%20Leader%20Area/Manifesto\\_ENG.pdf](http://www.slowfood.com/filemanager/Convivium%20Leader%20Area/Manifesto_ENG.pdf)
- 35 Founded in 2006, B-Corps are businesses from all industries that meet the highest standards of verified social and environmental performance, public transparency, and legal accountability to balance profit and purpose.
- 36 [www.goodfoodfdn.org/foundation/about/](http://www.goodfoodfdn.org/foundation/about/)
- 37 [www.farmersmarketcoalition.org/education/qanda/](http://www.farmersmarketcoalition.org/education/qanda/)
- 38 Stone Barns Center for Food & Agriculture is a nonprofit farm and educational center in New York
- 39 Food Tank is self-described as a food think tank
- 40 FoodCorps is an Americorps program focused on food education
- 41 Good Food Jobs is a job listing website
- 42 [www.fool.com/investing/the-10-biggest-food-stocks.aspx](http://www.fool.com/investing/the-10-biggest-food-stocks.aspx)
- 43 [www.fool.com/investing/how-to-invest-in-food-stocks.aspx](http://www.fool.com/investing/how-to-invest-in-food-stocks.aspx)
- 44 [www.fool.com/investing/2019/06/26/will-sprouts-farmers-market-ever-thrive.aspx](http://www.fool.com/investing/2019/06/26/will-sprouts-farmers-market-ever-thrive.aspx)
- 45 Recent examples of acquisitions by large food players include: Plated by Albertson's (2017), Pirate Brands and Amplify (maker of SkinnyPop) by Hershey (2018), Sir Kensingtons, Tazo Tea and Pukka Herbs by Unilever, Rxbar by Kellogg (2017), Annie's by General Mills (2014), Dave's Killer Bread by Flower Foods (2015), Enjoy Life Foods by Mondelez (2015)
- 46 [www.thestreet.com/topic/21481/top-rated-equity-food-products.html](http://www.thestreet.com/topic/21481/top-rated-equity-food-products.html)
- 47 Growth is measured by new locations, increased traffic and improving profitability
- 48 [www.fool.com/investing/the-10-biggest-food-stocks.aspx](http://www.fool.com/investing/the-10-biggest-food-stocks.aspx)
- 49 [www.restaurant.org/Downloads/PDFs/Research/SOI/restaurant\\_industry\\_fact\\_sheet\\_2019.pdf](http://www.restaurant.org/Downloads/PDFs/Research/SOI/restaurant_industry_fact_sheet_2019.pdf)



- 50 Others experiencing recent growth include Dunkin Brands (278 new locations in 2018, making it one of the fastest growing chains in the US); Jack in the Box; Burger King (8,000 locations in US and still growing); and Popeye's (135 new locations)
- 51 [www.fool.com/investing/how-to-invest-in-restaurant-stocks.aspx](http://www.fool.com/investing/how-to-invest-in-restaurant-stocks.aspx)
- 52 [www.restaurantbusinessonline.com/financing/sweetgreens-latest-investment-sends-its-valuation-soaring](http://www.restaurantbusinessonline.com/financing/sweetgreens-latest-investment-sends-its-valuation-soaring)
- 53 [www.foodtechconnect.com/2019/06/06/2018-u-s-food-beverage-startup-investment-report/](http://www.foodtechconnect.com/2019/06/06/2018-u-s-food-beverage-startup-investment-report/)
- 54 [www.plantbasedfoods.org/2019-data-plant-based-market/](http://www.plantbasedfoods.org/2019-data-plant-based-market/)
- 55 [www.markets.businessinsider.com/news/stocks/beyond-meat-ubs-plant-based-meat-market-85-billion-2030-2019-7-1028367962](http://www.markets.businessinsider.com/news/stocks/beyond-meat-ubs-plant-based-meat-market-85-billion-2030-2019-7-1028367962)
- 56 [www.foodinsight.org/wp-content/uploads/2018/05/2018-FHS-Report-FINAL.pdf](http://www.foodinsight.org/wp-content/uploads/2018/05/2018-FHS-Report-FINAL.pdf)
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- 58 [www.kalsec.com/food-trends-2019/](http://www.kalsec.com/food-trends-2019/)
- 59 [www.beveragedynamics.com/2018/09/10/number-of-u-s-breweries-should-reach-7000-in-2018/](http://www.beveragedynamics.com/2018/09/10/number-of-u-s-breweries-should-reach-7000-in-2018/)
- 60 [www.restaurant.org/Downloads/PDFs/Research/SOI/restaurant\\_industry\\_fact\\_sheet\\_2019.pdf](http://www.restaurant.org/Downloads/PDFs/Research/SOI/restaurant_industry_fact_sheet_2019.pdf)
- 61 [www.pos.toasttab.com/blog/restaurant-management-statistics](http://www.pos.toasttab.com/blog/restaurant-management-statistics)
- 62 Food was once thought to be most resistant to the switch to e-commerce, including several notable false starts in the recent past.
- 63 [www.thegiin.org/assets/GIIN\\_2019%20Annual%20Impact%20Investor%20Survey\\_webfile.pdf](http://www.thegiin.org/assets/GIIN_2019%20Annual%20Impact%20Investor%20Survey_webfile.pdf)
- 64 Investment examples cited across asset classes include Triodos Sustainable Trade (cash/cash equivalents); Root Capital (fixed income); Whole Foods (public equity); InvestEco Food Fund II (private equity); Farmland LP (real assets)
- 65 [www.trilliuminvest.com/wp-content/uploads/2017/05/Investing-in-Sustainable-Food-and-Agriculture.pdf](http://www.trilliuminvest.com/wp-content/uploads/2017/05/Investing-in-Sustainable-Food-and-Agriculture.pdf)
- 66 Trillium's detailed breakdown of these categories includes the following: Sustainable production (crops, livestock, fisheries), animal welfare, timber & wood products; Sustainable consumption (nutrition, healthy foods, food safety, GMOs, food waste); Sustainable Ag technology (irrigation, biowaste, software, big data, green chemistry, digital precision ag); Conservation and climate change (climate change mitigation & adaptation, deforestation, land care & soil health), water use, biodiversity; Social equity & sustainable livelihoods (fair trade, land grabs, workers' rights, child labor, women farmers, food sovereignty)
- 67 The Impossible Burger is sold in 7,000 restaurants in North America and Asia including Burger King and White Castle.
- 68 [www.businessinsider.com/everytable-healthy-fast-food-chain-changes-prices-depending-on-neighborhood-2016-7](http://www.businessinsider.com/everytable-healthy-fast-food-chain-changes-prices-depending-on-neighborhood-2016-7)



- 69 [www.impactalpha.com/the-future-of-food-distribution-opportunity/](http://www.impactalpha.com/the-future-of-food-distribution-opportunity/)
- 70 [www.ripplefoods.com](http://www.ripplefoods.com)
- 71 [www.newfoodeconomy.org/tanka-bar-general-mills-epic-provisions-bison-bars/](http://www.newfoodeconomy.org/tanka-bar-general-mills-epic-provisions-bison-bars/)
- 72 RSF Social Finance is a nonprofit social finance organization that offers investing, lending and giving services to those who are committed to improving society and the environment.
- 73 New Crop Capital is a venture capital fund that provides angel, seed, and series A funding to companies developing meat, dairy, eggs, and seafood with plant-based ingredients or through cellular agriculture, as well as companies that promote and distribute these products
- 74 Radicle Impact is an early stage VC firm that invests in responsible finance, clean energy, and healthy food sectors
- 75 PowerPlant Ventures is a growth equity fund that invests in emerging plant-centric consumer food, beverage, and foodservice companies
- 76 B Lab industry categories counted include Agricultural services (14), Catering and Meeting/Event Management (3), Food & Beverage (169), Growers (12), Restaurant 10
- 77 [www.foodsystem6.org](http://www.foodsystem6.org)
- 78 [www.foodfuture.co](http://www.foodfuture.co)
- 79 [www.segreenhouse.org/accelerate-your-enterprise/accelerator/](http://www.segreenhouse.org/accelerate-your-enterprise/accelerator/)
- 80 [www.familyfarmed.org/good-food-accelerator/](http://www.familyfarmed.org/good-food-accelerator/)
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- 83 [www.fairtradecertified.org](http://www.fairtradecertified.org)
- 84 [www.perennialfarming.org](http://www.perennialfarming.org)