

Instituting Change:

An Overview of

Institutional Food

Procurement and

Recommendations for

Improvement



JOHNS HOPKINS
CENTER *for* A LIVABLE FUTURE

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Contents

Introduction.....	1
Methods.....	3
Institutional Food Service in the United States: Overview of Trends in Regional and Sustainable Food Systems	4
Potential Benefits of Regional and Sustainable Food Procurement.....	8
▶ Socioeconomic Considerations	9
▶ Environmental Considerations.....	11
▶ Health Considerations	15
▶ Justice	17
▶ Animal Welfare	19
Regional and Sustainable Institutional Food Procurement: Progress and Barriers.....	21
▶ Food Service Contracts and the Rebate Pricing System.....	23
▶ Gaps in Knowledge	27
Recommendations	29
Tools for Facilitating a Shift Toward Regional and Sustainable Food Procurement	31
Conclusion	33
References	34

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Introduction

Growing public interest in the structure and effects of the United States food system has catalyzed the growing demand for regional,ⁱ sustainablyⁱⁱ produced food in recent decades.¹ Concerned about the environmental, health, animal welfare, and social justice implications of their food choices, an increasing number of people want to eat in ways that not only satisfy their taste buds, but reflect their values in these areas as well.^{2,3} Despite their interest in ethical eating, however, people may be constrained by structural factors such as which foods are available at their schools, hospitals, and worksites.⁴ Recognizing these barriers, as well as the fact that the scale and purchasing power of large institutions affords them significant influence over the way food is produced, priced, and distributed for consumption, many people have begun organizing efforts to reform institutional food procurement practices.

Food service management companies contract with institutions to provide services such as food procurement, menu development, price negotiation with food suppliers, staffing and management, regulatory compliance, and maintenance of space and infrastructure. Some institutions manage their own food service operations, but others choose to contract with a management company for various reasons, including potential financial or administrative benefits, or customer dissatisfaction with the current food service.⁵ While contracting with a food service management company can offer advantages and relieve institutions of the potential financial and administrative burden of independent food service management, it can also restrict an institution’s control over food service and may limit the procurement of food from regional, sustainable, or alternate suppliers.

Regional food: In this report, “regional” is inclusive of the term “local” and signifies that various scales and geographies are levied to supply a significant portion of the food needs of a geographical region.⁶

Sustainable food: The use of “sustainability” throughout this report encompasses all three pillars of the term—social, environmental, and economic.

Institutional food service management is big business—the largest three companies (Compass Group, Aramark, and Sodexo) alone reached nearly \$33 billion in revenue in North America in 2014.^{7,8,9} Compass Group estimates that the total North American food service market reaches \$72 billion annually, and that about 60% of that business is outsourced to a food service management company.¹⁰ These

ⁱ The United States Department of Agriculture (USDA) has defined local and regional food systems as “place-specific clusters of agriculture producers...along with consumers and institutions engaged in producing, processing, distributing, and selling foods;” (7) though the USDA uses these terms interchangeably and institutions and food service management companies employ different definitions of these terms, this report will use the term “regional” with the understanding that “regional” is inclusive of the term “local” and signifies that various scales and geographies are levied to supply a significant portion of the food needs of a geographical region.⁶ This report will use the term “local” only where the term is specifically used in the corresponding resource (e.g., in survey results where the survey questions used the term “local”).

ⁱⁱ The use of “sustainability” throughout this report encompasses all three pillars of the term – social, environmental, and economic.

international companies operate in various U.S. settings in the education, business and industry, health and senior care, sports, prison, and leisure sectors, among others (see Figure 2 on page 6). As an economic enterprise, food service management has necessarily prioritized increased revenue, lower expenses, and customer satisfaction.

A recent shift in people's interests surrounding the production and quality of food has resulted in the growth of regional food procurement in many institutions.¹¹ Students and their parents, community members, farmers, hospital workers and patients, and food service workers have all successfully organized initiatives to increase the percentage of institutional food procured from regional producers. Notably, the emphasis of many of these initiatives has been on criteria regarding the distance food has traveled, and has not taken into account aspects of production such as the structure and size, treatment of workers, health and environmental impacts, or animal welfare standards of different producers. Nevertheless, such initiatives are valuable and can foster education among consumers about the influence of institutional food procurement. Initiatives that do incorporate broader public institution procurement criteria (such as small-scale, regional, organic, and/or traditional foods) have been underway in Europe, Brazil, Japan, and Canada, in some places for over a decade.^{12,13,14} Nevertheless, food service management operations and agreements can make it difficult for individuals—and even institutional decision makers—to understand and influence their institution's food procurement policies.

This report reviews the literature and key information resources regarding institutional food service procurement systems, presents the potential benefits of a large-scale shift among institutional procurement policies, discusses some of the existing barriers to the adoption of policies that favor regionally and/or sustainably produced food, and provides recommendations and tools for influencing institutional food procurement practices. It aims to clarify gaps in the literature and resources—namely, information about food service management companies' rebate pricing systems and the potential socioeconomic, environmental, health, social justice, and animal welfare-related benefits of reformed procurement policies. Finally, this report is intended to serve as a resource for those seeking a better understanding of institutional food service procurement policies and provide a rationale for working toward reform.

Methods

The information presented in this report was assembled through a variety of methods, including a literature review, key informant interviews, and document analysis.

We first conducted a review of academic and grey literature to assess the current state of research on farm-to-institution practices and policies. This information was supplemented by document analysis, which entailed reviewing annual reports and website information available from leading food service companies in North America. Through our initial assessment, we identified some gaps in the academic research and practitioner resources aimed to support regional and sustainable institutional food procurement.

Specifically, one of the primary barriers to changing procurement policies in outsourced food service operations—food service contracts and the rebate pricing system, explained below—was notably absent from much of the literature discussing barriers to farm-to-institution procurement. To inform our understanding of this practice, we conducted semi-structured, open-ended interviews with 14 key informants who work in various capacities in different food service sectors (K-12 schools, colleges/universities, healthcare, and corporate) over the summer of 2015. We asked all informants to describe their involvement with institutional food service procurement practices; their perceptions of barriers to regional and sustainable procurement; and their opinions about what has been or could be successful in efforts to support such policies. We recruited these informants—who will remain anonymous in this report in order to protect their privacy and employment—through a snowball sampling method.

It is difficult to illustrate how the rebate pricing system operates because many data are not publically available and few informants were able to speak about the practices due to confidentiality restrictions. This lack of transparency limited the amount of details and information we were able to report. Despite these challenges, the rebate pricing system and its potential influence on procurement policies remained a focus of this report because of a perceived lack of coverage of these issues in other literature and reports.

Additionally, we found that institutional food procurement resources rarely included a systems analysis of all the impacts of the current food system (socioeconomic, environmental, health, social justice, and animal welfare); most focused on one or two aspects as reasons to support shifting procurement practices. We believe that a more thorough review of the literatureⁱⁱⁱ across food system sectors is essential to creating more comprehensive institutional procurement policies.

ⁱⁱⁱ We reviewed and included information from both published and grey literature in this report.

Institutional Food Service in the United States: Overview of Trends in Regional and Sustainable Food Systems

To understand the characteristics and impacts of institutional food service, it is first necessary to provide an overview of the U.S. food system and describe trends in

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regional food systems. The industrialization of U.S. agriculture, largely over the latter half of the 20th century, was characterized in part by specialization, mechanization, standardization, consolidation, and a greater reliance on off-farm inputs (e.g., pesticides and pharmaceuticals) with the majority of U.S. farmers abandoning diversified farming systems in favor of specialized operations that separate crop and animal production.¹⁵ Large corporations began to finance and operate industrialized food production facilities, acquiring small businesses and merging with other corporations to control multiple stages along the supply chain of agricultural products.^{8,16} This concentration and vertical integration along food supply chains is credited with improving efficiency, reducing costs, and lowering prices for consumers, but is also implicated in the decline in value of workers' wages¹⁷ (in one survey, only 13.5% of food system workers reported earning a livable wage¹⁸), and the loss of farmers' and citizens' autonomy over food production, processing, distribution, and sales.^{8,9} Regionalized food systems

were largely replaced by national and global systems, dependent on the processing and transportation of food over long distances.

The markets for food service management and distribution have become similarly concentrated, with the top three management companies operating food services in an estimated 45% of all North American institutional food service outlets (see Figure 1 on page 5). Food distribution is perhaps even more concentrated, with Sysco Corporation and US Foods Inc.—the two largest distributors—bringing in \$65 billion in combined annual revenue, or an estimated 75% of the national market for broadline distribution services.¹⁹

Even as food service management and distribution further concentrate, interest in regionalized food systems appears to be growing, with local food sales increasing and various hospitals, schools, and universities implementing farm-to-institution programs. Still, farms that sell locally—through local food marketing channels (including direct-to-consumer and intermediated sales to institutions)—are in the minority, with 7.8% of U.S. farms selling through these channels in 2012.⁷ Locally selling farms are disproportionately produce farms—growing vegetables, fruits, and/or nuts. In 2012, produce farms represented 29% of all local food farms, and

Figure 1: Consolidation of North American institutional food service industry

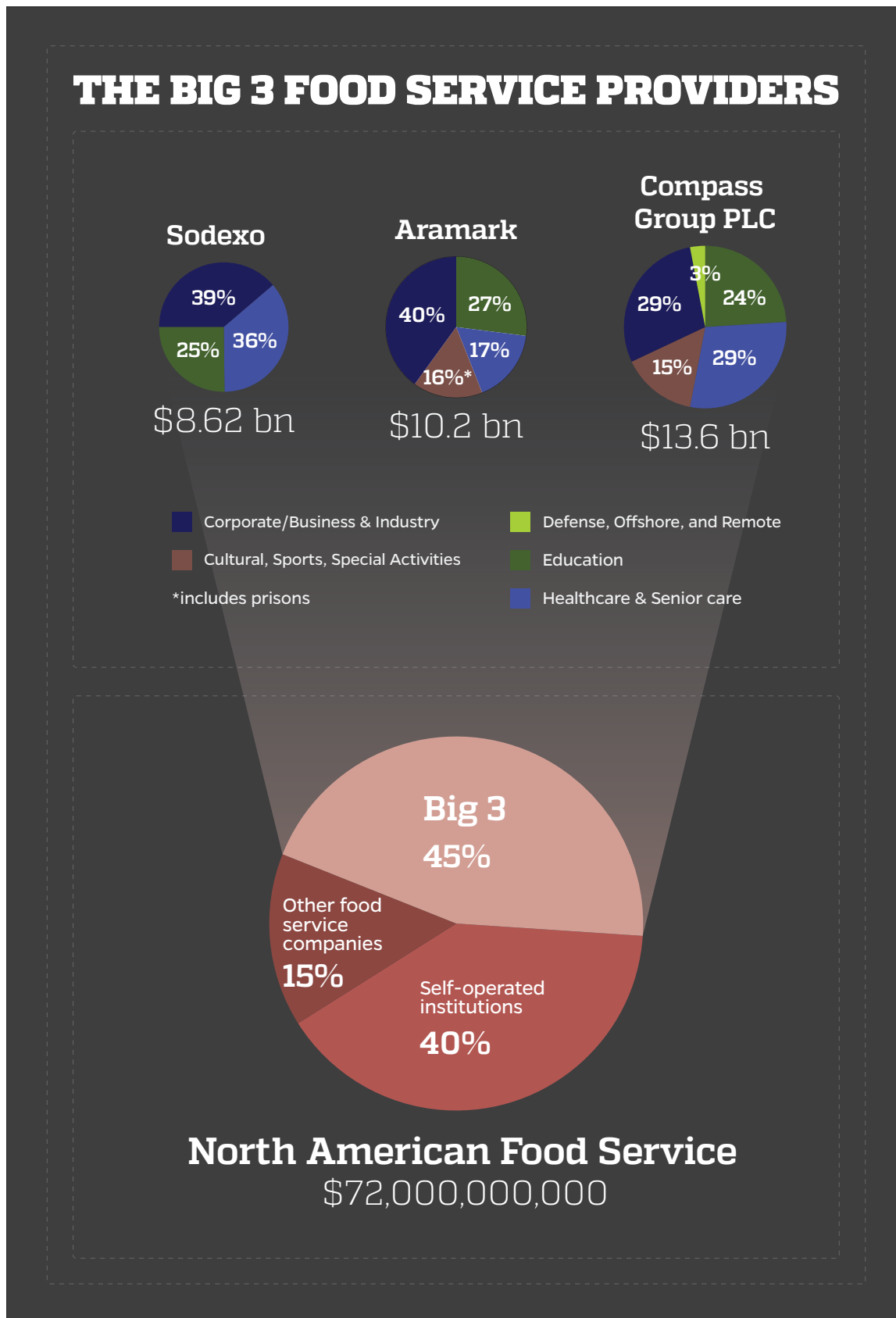


Figure 2: Institutional sectors served by "Big 3" food service providers

	Total North American Revenue	Colleges/ Universities	K-12 Schools	Healthcare	Senior Care	Prisons	Cultural, Sports and Special Activities	Corporate/ Business, Industry, and Government	Defense, Offshore, and Remote
Compass Group PLC	\$13.6 billion	✓	✓	✓	✓		✓	✓	✓
Bon Appétit Management Company		✓					✓	✓	
Chartwells College & University Dining Services		✓					✓		
Chartwells K-12 Schools			✓						✓
ESS Support Services								✓	
Eurest Dining Services								✓	
FLIK Independent School Dining			✓						
FLIK International								✓	
Gourmet Dining LLC		✓		✓				✓	
Lackmann Culinary Services		✓						✓	
Levy Restaurants							✓		
Morrison Healthcare Food Services				✓					
Morrison Senior Living					✓				
Restaurant Associates							✓	✓	
TouchPoint Support Services				✓	✓				
Wolfgang Puck Catering							✓		
Aramark	\$10.2 billion	✓	✓	✓		✓	✓	✓	✓*
Sodexo, Inc.	\$6.8 billion euro (\$8.6 billion)	✓	✓	✓	✓	✓*	✓	✓	✓

* Services these sectors, but not in the U.S.

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Compass Group (2014). Creating Opportunities for Growth: Annual Report 2014. Retrieved August 14, 2015 from http://www.compass-group.com/documents/Compass_AR_2014.pdf

Sodexo (2014). Registration Document Fiscal 2014 including the Annual Financial Report. Retrieved August 20, 2015 from <http://www.sodexo.com/en/Images/Sodexo-Registration-Document-Fiscal-2014342-828102.pdf>

34% of all produce farms sold food through local marketing channels, compared with only 3% of crop farms and 8% of food animal farms.⁷

The United States Department of Agriculture (USDA) estimates that more than half of all local food sales are marketed through intermediated channels, which include sales directly to institutions.²⁰ Around 22,615 farms sold a collective \$3.3 billion of food exclusively through intermediated marketing channels in 2012.⁷ An additional 25,756 farms sold \$1.6 billion through both direct-to-consumer and intermediated marketing channels.⁷ The majority of locally marketed food is produced on farms with gross cash farm income less than \$75,000 annually; these farms represented 85% of all farms selling locally, while farms with sales between \$75,000-\$350,000 represented 10% and farms with sales of at least \$350,000 represented 5% of all local food farms.⁷ Conversely, large farms that sell locally account for nearly 67% of local foods sales, while small farms account for only 13% of sales.⁷ This is likely due to larger farms' capacity to produce and distribute enough food for local institutions that demand higher volumes and a reliable supply.

Potential Benefits of Regional and Sustainable Food Procurement

Recent interest in institutional sourcing of food from regional producers who follow ecologically sound, socially just, and humane practices has coincided with a growing recognition of the social and environmental harms associated with the current food system in the United States.^{21,22,23} Understanding the impacts of the current food system is essential in order to accurately portray the reasons—and thereby gain support—for regional and sustainable food procurement policies, and to design effective policies to address these challenges. The following section of this report provides an overview of the research on the U.S. food system as it currently stands, and highlights ways in which institutional procurement practices can positively affect this system.

It is important to emphasize that there is not a binary distinction between small-scale and large-scale producers, between “family” farms and corporate ones, between agroecological production systems and industrial ones, or between actors in an alternative local food system and those in the conventional, global one. Many

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food producers fall somewhere in the middle of each spectrum, a position that provides them more flexibility than industrial producers to transition to more socially, economically, and environmentally sustainable systems while also meeting a significant portion of regional food demand.²⁴ While they may provide competitive alternatives to large-scale agriculture, many mid-sized, regionally located producers (often referred to as “agriculture of the middle”) are facing a number of challenges that threaten their continued existence.^{24,25,iv} Such challenges include the consolidation of the seed, manufacturing, and food retail industries and the growing influence such companies thus have on farm management decisions and in contractual agreements.²⁴ With their steady and significant demand, institutions are well positioned to support and expand these essential markets.

Moreover, regional food systems are not inherently more ecologically sustainable or socially just than systems at other scales.²⁶ An institution may be located near an industrial food animal production operation, for instance, or a small-scale farm may still provide poor working

^{iv} It is difficult to denote the proportion of all farms that are considered as part of the “agriculture of the middle (AOTM),” as this term is less defined by a farm’s size as it is by the philosophies of its supply chains (falling in between large-scale, undifferentiated commodity agriculture and small scale agriculture that directly markets to CSAs and farmers markets). When defined as farms with annual gross sales between \$50,000-499,999, AOTM makes up 17.6% of all farms in the U.S., producing 16.4% of all farm sales in the U.S. on 35.1% of farmland (compared to small farms making less than \$50,000 which capture 2.9% of all farm sales, and large farms with annual gross sales over \$500,000 accounting for 80.7% of all farm sales).²⁵

conditions for its farmworkers. Additional considerations, such as third-party certifications, must be considered to ensure that all of the benefits that institutional procurement policies nominally support are pursued. Examples of guides to form criteria for institutional procurement policies are described on page 31.

Institutional food policies not only have a significant potential to directly affect the economic and physical infrastructure of the current food system; accurately and widely marketed efforts may also generate broader awareness and discussion of the impacts of the current food system and the potential benefits of transitioning to a more regionalized and sustainable one, as discussed below. Students in particular may benefit from learning how to apply classroom lessons to practical institutional and personal decisions.²⁷ Communicating these benefits to food service management and workers has also been demonstrated to foster support, commitment, and long-term sustainability of institutional procurement policies.²⁸

Socioeconomic Considerations

Community Impact

The decline of rural communities, economies, and social structures is often attributed to the shifting national landscape from numerous small and medium-sized independent farms to a small number of large-scale industrial farms.^{29,30} In this case, industrial farms are characterized as those that are larger in size; dependent upon hired labor (instead of family members); more likely to be specialized, mechanized, and reliant on off-farm inputs; and more directly linked with processors, seed companies, and other agribusiness industries through contract production and vertical integration.³¹

A review of 56 studies conducted since the 1930s on the impacts of industrial farms on the socioeconomic well-being and social fabric of rural communities found that they consistently contribute to poor outcomes on many social indicators, especially compared to mid-sized farms.²⁹ These indicators include greater income inequality, higher unemployment and lower total community employment, smaller local population size, decreased civic engagement, less democratic governance, gaps in community services, increased individual and community stress, and decreased enjoyment and value of properties, particularly those located near industrial food animal production operations, among other factors.

Shifting institutional procurement away from industrial farms – and especially towards medium-sized regional farms which have the capacity to meet institutional demand and transition to more sustainable practices – has been promoted as one way to counter these trends and strengthen community well-being.²⁴

Economic Impact

Food service professionals and food distributors consistently cite “supporting local farmers” or “aiding the local economy” as some of their top reasons for engaging in farm-to-institution programs.^{32,33,34,35}

Institutional food procurement thus far has had a negligible impact on participating farmers’ incomes, as most food service orders comprise a small percentage of

...institutional food procurement helps participating farmers diversify their markets, increase off-season sales, and gain an outlet for surplus and/or less desirable foods...

farmers’ total sales while also requiring extra time and commitment from farmers compared to conventional markets.³⁶

Despite the lack of direct economic benefits, farmers themselves describe their desire to support their local communities and economies as a primary reason for participating in such programs.^{36,37} Beyond income benefits, institutional food procurement helps participating farmers diversify their markets, increase off-season sales, and gain an outlet for surplus and/or less desirable foods, such as “ugly” produce or cuts of meat not typically purchased by customers or farm-to-table restaurants.³⁶ Supporting small- and mid-sized farmers through institutional purchasing may also help farmers retain

autonomy in face of the growing threats from agribusiness market forces such as contract production and vertical integration.³⁶

Assessing the impact of institutional food procurement on the larger regional economy is not a simple task. One study modeled the potential regional economic impact if educational and healthcare institutions in Central and Northeast Minnesota were to buy 20% of food products from regional farms.³⁸ It found that regional farmers would net about \$480,000 in a standard growing season and \$590,000 in an extended growing season, which translates to a net influx of between \$250,000 and \$360,000 into the regional economy, once accounting for decreased wholesaler sales.³⁸ Another report, focused on Michigan, found that its institutional food procurement market already supports agricultural producers in the state through the purchase of \$19 million of unprocessed commodities in 2009.³⁹ Moreover, a new analysis by the Union of Concerned Scientists found that if 25% of the 22,000+ institutions and intermediate markets in Iowa procured local food (based on average local food purchases reported by farm-to-institutions), it would generate over \$800 million annually for the state’s economy. If at least half of these local purchases came from midsize farms, it would support over 4,249 farms and 12,320 full-time farm jobs on those farms.¹⁶¹

Some studies have attempted to quantify the multiplier effect of regional food purchases – that is, the number of times a dollar cycles through a regional economy. A higher number means more money stays in a regional economy. For example, one study estimated economic multipliers of 1.40 (conventional) or 1.58 (organic) for large-scale corn and soybean farms in Iowa regions.⁴⁰ Another study of socially

connected, small-farm regions in Wisconsin found a multiplier of 2.6.⁴¹ A few economic impact studies, summarized in the USDA Economic Research Report on Local Food Systems, have examined the role of farmers markets in particular, with multipliers ranging from 1.4 to 1.8.⁴²

Other experts argue that current economic impact models, and their associated economic multiplier calculations, do not accurately capture the factors unique to the functioning of alternative food networks, such as distribution channels, processing facilities, farm inputs, labor needs, or production practices.⁴¹ Farm-to-institution procurement does create slightly more jobs in the regional economy, such as regional distributors aggregating small farmers' produce.⁴¹ However, it may be more important to highlight and promote some of the more proven socioeconomic benefits coming from regionalized food economies, such as the formation of relationships that strengthen social capital and networks in areas of impact.^{41,43,44}

Environmental Considerations

The production, processing, transportation, preparation, consumption, and disposal of food all contribute to the environmental impacts – both positive and negative – of our food system. There are many factors to consider for minimizing the environmental externalities and maximizing the social good of our food system – with no simple solution to achieving such goals. Nevertheless, institutional food service policies can support these aims by sourcing from farms and processing facilities that employ ecologically sound practices at a variety of scales, and by creating menus that offer more seasonal and sustainable food choices.

Food production

Agroecology, which incorporates the study of ecological systems into agricultural practices, has demonstrated that food can be produced in ways that sustain and, in some cases, regenerate the natural resources on which our life and well-being depends in order to provide adequate and culturally acceptable food today and for generations to come.²¹

Agroecological models rely on techniques including crop rotations, low- or no-till planting, integrated pest management, soil management, and diversified planting schemes.^{46,47} Many agroecological systems also incorporate animals into the crop rotation system, thus lessening, if not eliminating, the need for

Estimating the economic impact of a hospital's procurement strategy

In one case study, the University of Vermont (UVM) Center for Rural Studies assessed the economic impact of the UVM Medical Center's (formerly known as "Fletcher Allen Health Care") local food procurement practices.⁴⁵ The healthcare institution committed to sourcing healthy and sustainable foods in 2006 through the Health Care Without Harm pledge. In 2012, it purchased about \$1.8 million of food (44% of total food purchases) to supply the 2 million meals it serves per year from suppliers in Vermont and the nearby region. The researchers determined the institution's local purchases supported an economic multiplier of 1.98 (accounting for opportunity costs of the conventional wholesale sector losing business). In addition, the local suppliers interviewed noted positive benefits of selling to the UVM Medical Center, including gaining experience in institutional markets.

petroleum-based or mined fertilizers, while also reducing inputs such as feed and water needed for conventional animal production.⁴⁸ Such practices can be employed on farms of varying scales and adapted to specific regional conditions.

Nevertheless, the vast majority of food consumed in the U.S. today is produced by an industrial agriculture system that not only damages the physical environment, but also lacks the resilience necessary to address rising global challenges to achieving food security in the face of climate change, population pressures, and resource depletion.²¹ Some of its impacts include:

- ▶ **Soil erosion:** Intensive agriculture practices (e.g., tillage agriculture, no cover crops, and overgrazing pastures) can contribute to accelerating topsoil erosion rates that exceed the natural rate of soil formation and threaten the long-term productive capacity of the soil.^{49,50}
- ▶ **Biodiversity loss:** Monoculture agricultural systems and the loss of diversity among species throughout the ecosystem threaten the pollination, pest control, water retention, and fertility and nutrition enhancement services, as well as general resilience, which agrobiodiversity supports.^{51,52} Some common industrial fishing practices, including bottom trawling and dredging, also cause significant biodiversity loss in and disruption of aquatic ecosystems.⁵³
- ▶ **Natural resource depletion:** Increasing demand for freshwater, along with growing limitations expected from climate change, place increased pressure on the large proportion of U.S. agriculture dependent on irrigation.⁵⁴ The heavy reliance of our industrial food system on petroleum for farm machinery, pesticide manufacturing, and transportation, is threatened by declining oil reserves.⁵⁵ In addition, most of the world's fisheries are now fully exploited, depleted, or recovering, and global catches have continued to decline since their peak in 1996.^{56,v}
- ▶ **Nitrogen and phosphorus cycle disruption:** The use of synthetic fertilizers has considerably increased the food supply over the past century,⁶⁰ but also significantly modified nitrogen and phosphorus cycles.^{61,62} Nutrient runoff and groundwater contamination from synthetic fertilizers and animal manure causes harmful algal blooms, leading to “dead zones” and aquatic ecosystem degradation.⁶³ Nutrient pollution also enters aquatic ecosystems directly from uneaten feed and the discharge of fish wastes from some aquaculture

^v With wild fisheries rapidly declining, seafood is increasingly farmed through aquaculture systems. Aquaculture now supplies approximately half of all seafood consumed by humans,⁵⁶ and has surpassed global beef production.⁵⁷ While some intensive aquaculture production methods have significant environmental and public health concerns (discussed further in this report), others can be fairly sustainable, such as recirculating aquaculture systems or farms which produce filter feeders such as mussels and oysters.^{58,59} The Marine and Aquaculture Stewardship Councils certifications and the Monterey Bay Aquarium Seafood Watch guidelines offer helpful recommendations for developing sustainable procurement policies.

systems.⁶⁴ Expected depletion of global phosphate rock sources—the major source of phosphorus for fertilizer—within the next century threatens our long-term ability to produce food.⁶⁵

Processing and Transportation

One of the main reasons cited by institutions for procuring local food is to reduce “food miles” – that is, the distance the food travels from where it is produced to where it is consumed – and the greenhouse gas emissions and costs associated with such transportation.⁶⁶ Food miles statistics, such as the finding that conventional produce in sampled Iowa institutions traveled an average of 1,500 miles from farm to plate,⁶⁷ are used to support local food sourcing.⁶⁸ These statements, however, may not consider variances between transportation mode (i.e. ship, rail, truck, or plane) or lost economies of scale that come with larger processing, storage, and distribution systems.^{69,70} Increasingly, experts are promoting the development of more regionalized food systems, which retain many of the efficiencies of national and global distribution and processing infrastructure while remaining more fuel efficient and providing a greater capacity to meet demand than local ones.^{6,71} It is also important to note that while reducing transportation-related emissions must be part of the broader changes needed to support a more ecologically-sustainable food system, the vast majority of greenhouse gas emissions attributed to foods, especially animal products, are from the production-phase.⁷² Thus, in most cases, the types of foods people eat and how those foods are produced are more important than how far they travel.⁷²

...more regionalized food systems retain many of the efficiencies of national and global distribution and processing infrastructure while remaining more fuel efficient and providing a greater capacity to meet demand than local ones.

Consumption

Demand-side approaches to mitigating the environmental impacts of our food system must not be overlooked. A growing body of evidence shows that, particu-

Meatless Mondays:

Over the past decade, a number of hospitals, schools, universities and other institutions across the country have introduced Meatless Mondays—a global campaign encouraging consumers to “cut out meat one day a week” to improve their health and that of the planet—into their weekly menu schemes. By featuring appealing vegetarian menu items on Mondays, these institutions are making it easier for consumers to explore plant-based menu options and for institutions to discover popular items to consider offering more than once a week. In 2011, Sodexo launched the Meatless Monday campaign in all of its hospital, school, and university locations nationwide, reaching over 10 million customers per day.⁸¹ An initial evaluation of the directive found that, despite some challenges in consistent implementation, it had prompted an increase in vegetable sales on Mondays in over 40% of food service sites, and 65% of participating sites planned to continue to promote the campaign.⁸¹ Further research is needed to determine the long-term impacts on consumer behavior of the initiative.

larly in industrialized countries like the United States, dietary shifts towards reduced animal product consumption and the consumption of animal products lower on the food chain have a greater potential for reducing dietary ecological footprints than supply-side production improvements or the reduction of food miles.^{73,72} Globally, food animal production contributes 14.5 percent of total human-induced greenhouse gas emissions (with the highest impact coming from beef and dairy products), and is a leading driver of deforestation and biodiversity loss.^{74,vi} In general, most animal proteins require significantly more water, fossil energy, and land to produce than plant-based proteins.⁷⁶ While well-managed farming on marginal rangelands that are unsuitable for crop production can be part of a more sustainable global food system, such operations support only 30% of current food animals produced and cannot meet escalating consumption demands.⁷⁷ Research shows that radical dietary changes are essential to meet climate change mitigation targets.⁷⁸

Many food service operators are beginning to explore menu changes that encourage the consumption of more plant-based proteins and fewer animal products, such as featuring animal proteins as garnishes in pastas and stir fries instead of as center-of-plate components; offering a variety of portion sizes from which customers can choose; and providing more vegetarian options.^{79,80} This approach has also been touted as a cost-saving strategy, as institutions may use the money saved from purchasing fewer animal products to choose higher quality, less processed, pasture-based or ecologically certified, and humanely raised ones.⁸⁰ Health Care Without Harm’s Balanced Menus Initiative, which promotes a “less meat, better meat” strategy, supports hospitals in committing to reduce their purchases of meat and poultry and reinvest the cost savings in more sustainable options.

^{vi} In the U.S., livestock production represents a smaller proportion of the country’s total emissions (the entire agricultural industry contributes only 9 percent) because of the country’s relatively high emissions from the energy and transportation sectors.⁷⁵

Disposal

Institutional food policies may also include strategies to reduce and compost food waste. Given the fact that 31-40% of food available in the U.S. is wasted each year and the ethical and environmental implications associated with food waste,^{82,83} waste-sensitive procurement strategies are increasingly promoted to improve environmental and economic outcomes while shifting broader social conventions toward reducing and mitigating the impact of food waste.^{84,85}

Health Considerations

Individual

The standard American dietary pattern, characterized by a high intake of sugary desserts and drinks, processed and red meat, refined grains, and high-fat dairy products, is associated with a number of chronic diseases including Type II diabetes,⁸⁶ cardiovascular disease,⁸⁷ some types of cancer,⁸⁸ and kidney disease.⁸⁹ Evidence suggests it also contributes to adverse mental health outcomes such as cognitive impairment (including dementia)⁹⁰ and depression.^{91,92}

A growing body of research focuses on how physical food environments, such as retail food stores, cafeterias, and restaurants, influence eating patterns.⁹³ Results indicate that interventions aimed at increasing the consumption of healthy foods in these sites, particularly in universities and worksites, may prove more effective and influential than interventions targeting individuals.⁹⁴ Given that childhood food preferences and eating practices influence lifetime dietary behavior,^{95,96} school cafeterias are also particularly promising sites to encourage children to adopt the lifelong habit, and associated health benefits, of eating more fruits and vegetables.^{97,98} Institutional policies that emphasize the procurement and preparation of high-quality vegetables, fruits, whole grains, legumes, and moderate amounts of animal products (including sustainable seafood),^{vii} create food environments that may encourage individuals to consume more healthful foods.

Community

Many of the health harms of industrial food production and processing in the U.S. fall disproportionately on certain groups of people, most notably food system workers and their families, communities of color, and low-income communities. Institutions prioritizing food from production and processing facilities that work to

^{vii} Most fish and shellfish are good sources of nutrients, particularly the omega-3 fats EPA and DHA. However, it is important to note that much of the pollution from human industrial activities, including heavy metals, mercury from coal-fired power plants, and persistent organic pollutants such as DDT from agricultural pesticides ends up in streams, rivers, and oceans, where it accumulates in the tissues of aquatic plants and animals.⁹⁹ While the benefits of fish consumption still outweigh the potential health risks from contaminants, institutions may design menus which encourage the consumption of lower-risk and sustainably-sourced fish species (e.g., small forage fishes lower on the food chain).^{23,100,101}

avoid—or, if necessary, mitigate—the negative health impacts discussed below may help shift the infrastructure of the current food system toward one that supports the health and wellbeing of workers and communities.

Food production, aquaculture, and food processing workers perform strenuous labor with dangerous equipment, often in extreme temperatures and other environmental conditions, which contributes to their high rates of occupational injuries and disease.^{102,103} Farmworkers are at an increased risk of acute pesticide poisoning and other pesticide-related illnesses, including some cancers; nervous system and reproductive disorders; and respiratory, skin, cardiac, liver, and kidney conditions.¹⁰² Crop and animal production workers may be exposed to airborne pollutants, including particulate matter, pathogenic bacteria, endotoxins, and noxious gases and odors, that are associated with respiratory conditions.¹⁰² Aquaculture workers may be exposed to a different set of toxic chemicals and harmful gases that may increase their risks for respiratory and skin illnesses, as well as poisoning events.¹⁰³ Industrial food animal production, aquaculture, and processing workers have a greater risk of contracting bacterial infections, including antibiotic-resistant strains, and are more likely to spread these infections to family and community members.¹⁰² Food production and processing workers, a majority of whom are immigrant and migratory workers, also experience elevated rates of food insecurity, stress, and depression.^{104,105}

Residents living in agricultural communities face a number of physical, mental, and social health risks associated with their proximity to industrial crop and/or food animal operations. Community members are at risk for many of the same respiratory illnesses, bacterial infections, digestive tract disorders, and other health conditions from air and water polluted by pathogenic bacteria, pesticides, drug residues, hormones, heavy metals, excess nutrients, and other contaminants as workers.^{106,107,108} Due to the sensitivity of their developing organ systems and smaller bodies, children are particularly susceptible to exposure to pesticides and other environmental toxicants.^{109,110} Neighbors of industrial food animal production operations also report high rates of stress and negative moods, along with other significant quality of life disruptions.^{106,107} Environmental justice concerns have been raised about the fact that these farms, and their associated threats to health and well-being, are concentrated primarily in communities of color and low-income communities that lack the socioeconomic and political power to prevent, mitigate, or adapt to these environmental inequities.^{108,111,112}

Population

The broader public health implications of certain food production practices must be considered. Significant concerns have been raised over the contribution of widespread sub-therapeutic antibiotic use for growth promotion and disease prevention in industrial food animal production operations and aquaculture facilities to the

growing antibiotic resistance crisis.¹¹³ In addition to antibiotics, studies have raised concerns about the potential human health impacts of other industrial food animal feeding practices that can result in the presence of bacterial pathogens, prions, metals, mycotoxins, and dioxins in animal feed and animal-based food products.¹¹⁴

The use of chemicals and other veterinary drugs in the production of farmed fish pose additional risks to human health.¹¹⁵

Experts are also concerned about the generation and spread of novel infectious diseases, such as Nipah virus, SARS, and influenza, which may originate or transfer to humans in industrial food animal production operations.¹¹⁶

Justice

Social justice concerns related to food sourcing have also been raised, on behalf of both producers and laborers. Fair trade certifications^{viii} focus primarily on providing fair prices for small-scale, independent, and ecologically sustainable producers, most often with the goal of challenging the inequities that arise from trading in global capitalist markets.¹¹⁹ A smaller, but growing, emphasis on improving the poor working conditions, low wages, substandard housing, and inadequate labor rights, among many of the additional health risks discussed above, for food chain workers in the United States and abroad has also fueled the interest in fair trade schemes.^{120,121}

Providing quality, nutritious food in institutional settings, most notably in schools and prisons where consumers do not have much—if any—choice of alternative food sources, may also be considered a social justice issue in itself. In 2013, 15.8 million children under the age of 18 in the United States lived in food-insecure households, meaning that they did not have consistent access to adequate food for a healthy, active life.¹²² Federal school nutrition programs, which serve nearly 31 million students through the National School Lunch Program and 14 million through the School Breakfast Program, seek to improve food security among youth. Through these programs, students consumed over 5 billion lunches and 2.3 billion breakfasts in the 2013-2014 school year, 72% and 85% of which, respectively, they received free or at reduced prices based on low family income.¹²³ Adequate, healthy school meals not only address childhood hunger, but may also improve students' health, educational achievements, and food attitudes and habits.¹²⁴ Institutions can strive toward socially just

Certified Responsible Antibiotic Use Standard:

In spring 2015, School Food FOCUS, in collaboration with Pew Charitable Trusts, announced the launch of the first USDA-verified industry standard for responsible antibiotic use. Poultry producers who receive the certified responsible antibiotic use (CRAU) label are restricted from using antibiotics with analogues in human medicine except in rare cases when prescribed by a veterinarian to treat sick animals.¹¹⁷ Specifically aimed at producers who sell to schools, hospitals, and other institutions with large purchasing power, the CRAU standard has the potential to transform industry practices in this realm.¹¹⁸ Already adopted by the largest poultry processor in the country—Tyson Foods—the standard requires third-party verification and may help prompt stronger verification efforts for similar alternative food production initiatives.

^{viii} We use the term fair trade certifications to refer to the variety of labels verified by third-party organizations (e.g., Fair Trade USA, Equal Exchange, or the World Fair Trade Organization) to designate that a specific product was produced according to specific social (most notably labor) and environmental standards.

procurement policies that provide food that supports the wellbeing of both consumers and producers.

International

A review of fair and alternative trade literature related to the global market found that significant inequities exist in the distribution of and benefits from fair trade premiums, especially as they relate to land tenure, gender equity, labor status, and impact on the broader community.¹²⁵ These authors still support the values of fair

Coalition of Immokalee Workers' Fair Food Program:

Alternatives to typical fair trade certifications have also arisen in recent years. Most notably, the Coalition of Immokalee Workers' Fair Food Program, deemed by one labor relations professor as "the best workplace-monitoring program" in the U.S., has fostered a partnership between farmers, farmworkers, and retail food companies to ensure humane wages and working conditions for those who pick fruits and vegetables (predominantly tomatoes), on participating farms.¹²⁹ The program owes much of its rising success, which includes a 2014 Presidential Medal for Extraordinary Efforts to Combat Human Trafficking, to the demand from food service companies, restaurants, and other retailers—pressured by consumers—for improved standards for farmworkers. This example demonstrates the vast purchasing power of institutions to drive more socially just food system practices when government regulations and existing certification systems prove to be inadequate.

trade, but suggest that advocates critically monitor, evaluate, and adjust certification standards in order to ensure they achieve their desired outcomes. Other experts argue that the different – and sometimes competing – priorities of domestic small-scale producers and those in the Global South, as well as those of farm owners versus laborers, must be more thoroughly addressed when designing fair trade certifications.^{125,126} Another critique of the fair trade movement is that it is accessible to mostly wealthier consumers in the Global North. Institutional procurement of fair trade foods has been suggested as one way of expanding access to a wider set of consumers,^{119,127} thereby advancing the movement's goal of systemic transformation.

Domestic

Fair trade certifications in the United States, which emerged much more recently than global ones, focus more strongly on food system worker rights than on those of trade-associated inequities imposed on producers or local community development efforts funded by fair trade premiums.

The first domestic fair trade label – the Agricultural Justice Project's Food Justice Certification – was launched in 2010. This standard ensures safe working conditions, fair and equitable contracts for farmers and buyers, clean and safe farmworker housing, workers' and farmers' right to freedom of association and collective bargaining, clear conflict resolution policies for all throughout the food chain, learning contracts for interns and apprentices, the rights and protection for children on farms, and environmental stewardship.¹²⁸ As the program remains fairly new, a limited number of farms in the U.S. and Canada have been certified.

Given the poverty-level wages associated with food system jobs, some institutions may also consider additional policy changes, such as minimum wage increases, paid sick leave, workers compensation, and other benefits that support the welfare of workers, not just at the production side of the food system, but throughout the food chain up to front line workers serving in their own cafeterias.^{18,23} Union contracts play an essential role in improving worker safety, health, and well-being by providing many of these benefits,¹³⁰ though they currently represent less than 2% of private-sector employees in agriculture, food service and other related industries.²³

Animal Welfare

The industrialization of agriculture has profoundly altered the way most animals are raised for food in the U.S. Since the 1950s, specialization and intensification have led to the widespread transition from diversified farms to industrial food animal production operations.¹³¹ The vast majority of food animals produced in the U.S. are produced in confined operations, with nearly half produced in the largest sized operations (occupying less than 5% of the land used for animal production).¹³² These facilities confine thousands of cattle or dairy cows, tens of thousands of pigs, and hundreds of thousands of broiler chickens or laying hens at a single facility.¹³³ These conditions have raised serious concerns among experts and the public about the welfare of the animals raised in such operations.

Designed to produce abundant amounts of meat, eggs, or milk rapidly and at minimal cost, most industrial food animal production operations raise animals in crowded indoor facilities, including crates for veal calves, gestation crates for sows, battery cages for laying hens, and other confined spaces.¹³¹ The animals rarely have access to the outdoors or the ability to exhibit their natural behaviors.¹³¹ To control for the animals' aggressive behavior when they are under extreme stress, painful bodily alteration—such as debeaking chicken, tail removal of pigs and dairy cattle, and dehorning beef cattle—is conducted, often without anesthesia or other forms of pain relief.^{134,135} Many animals experience additional physical and psychological harms beyond those listed here. It is also important to note that animal production on small-scale, organic, or pasture-based farms does not necessarily ensure the animal's maximum well-being; animal health and welfare problems may exist in these systems, too, and such farms should be audited before presuming higher animal welfare standards.¹³⁵

Compass Group USA—and most notably its subsidiary group, Bon Appétit Management Company—has led the way in animal welfare standards among the food service industry. The company has made a number of commitments over the past decade, including purchasing 100% cage-free shell (and soon, liquid) eggs, eliminating pork and veal from animals confined in crates, and doubling the amount of humanely-raised animal products, all certified by third-party auditing systems.¹³⁹

Consumers are increasingly expressing their demand for the humane treatment of farm animals.¹³⁶ Federal government regulation regarding the treatment of farm animals remains limited.¹³⁷ Thus, many states and a few local jurisdictions have

passed animal cruelty legislation to outlaw or regulate certain practices.¹³⁸ Some retailers and restaurants have also been demanding minimum animal welfare standards from their suppliers, initiating influential changes throughout the industry.¹³⁷ As consumers and experts have expressed concern over the sufficiency of voluntary industry standards, a variety of third-party certifications have arisen to meet such demand.¹³⁷ Institutional policies supporting the procurement of more humanely raised meat, dairy, and eggs should investigate the different animal welfare standards, and choose the strongest and most meaningful certifications whenever possible.

Regional and Sustainable Institutional Food Procurement: Progress and Barriers

Regional food procurement has become increasingly common among institutions, with 6% of hospitals having implemented a local food procurement program as of 2011 and more than 40% of public school districts participating in farm to school activities during the 2011-2012 school year (or starting during the 2012-2013 school year).¹¹ In 1996, there were just two farm-to-school programs in the U.S.; there are now more than 2,300 farm-to-school programs operating in all 50 states.¹⁴⁰ The best estimate of local food expenditures in schools during the 2011-12 school year—the most recent year for which data is available—is \$385 million, which represents 13% of reported school district expenditures on food.¹¹

State governments are also taking notice, as an estimated 37 states have passed laws requiring some or all state and local agencies to allow geographic preference for purchasing regionally produced food.¹⁴¹ In 2012, the Centers for Disease Control and Prevention (CDC) issued Health and Sustainability Guidelines for Federal Concessions and Vending Operations, urging federal agencies to make 25% of their offered food products organic, locally produced, or documented sustainably grown.¹⁴² These guidelines recognized the potential for regional food systems to foster economic opportunity for farmers, stimulate community economic development, expand access to affordable local food, cultivate healthy eating habits, educate and empower consumers, and demonstrate the connection between food, agriculture, community, and the environment.¹⁴² Such recent efforts signify a growing interest in and awareness of the potential benefits of regionalized food systems.

Several studies have investigated institutional administrators' motivations and perceived barriers to purchasing regionally produced foods, as well as farmers' and distributors' perspectives on selling to institutions. One study of farmers, food service administrators, and university students found that the perceived benefits of a farm-to-university program included a better connection between the university and the surrounding community, fresher food in the cafeteria, and increased support for local farmers.¹⁴³ That said, the cost of farmers' liability insurance, anticipated variability in the price of fruits and vegetables, and year-round availability limitations were cited as barriers to implementing such a program.¹⁴³

Another study among South Carolina farmers who did not yet sell directly to schools found that farmers were interested in selling to schools in order to establish a new revenue source, increase access to healthy and regional produce, educate children about food systems, and foster community relationships.¹⁴⁴ However, good agriculture practice (GAP) certification—which includes food safety training and covers potential liability concerns—was identified as a major barrier for small-scale or limited-resource farmers to enter into farm-to-school contracts, as GAP

implementation, compliance, and record-keeping may increase farmers' costs and require time.¹⁴⁴

The 2015 USDA report, "Trends in U.S. Local and Regional Food Systems: A Report to Congress," found that one of the perceived major barriers to regional food procurement was the additional time required to find and purchase food from regional producers. The authors suggest that increasing the availability of regional food through distributors could mitigate this barrier.¹¹ Almost two-thirds of public school districts participating in the USDA's Farm to School program purchased local foods through a distributor, highlighting the importance of the availability and affordability of local foods in distributors' channels. A growing recognition of the potential for regional food hubs to aggregate and supply necessary quantities of food to institutional purchasers provides another promising way to overcome some of these logistical barriers.^{145,146}

In a survey of school district administrators on the obstacles to local food procurement, 68% of administrators from districts with farm to school activities, and 55% from those without, cited the lack of year-round availability of certain foods.¹¹ High prices were seen as a barrier for fewer than 50% of all districts with farm to school activities.¹¹ For districts without farm to school activities, 41% cited a lack of availability of local foods from primary vendors as a barrier, and 27% said they experienced difficulty in finding suppliers for local food.¹¹

Employees of School Food FOCUS—a non-profit organization that helps large school districts increase regional food purchases, among other efforts—also highlighted the budgetary and operational challenges that institutions often face and the role of these challenges in efforts to change food procurement policies. They discussed the tendency for food service management companies to present contracts that address budgetary and management concerns, describing a perennial problem of school districts having to "fight the threat of food service management companies coming in" to manage food service. Although management companies can meet a low budget, School Food FOCUS explained that institutions that they work with have reported lower food quality and less flexibility in their procurement options after outsourcing food service to a management company.

A lack of infrastructure for food processing is another commonly voiced barrier, limiting smaller farms' abilities to process, preserve, and store fresh food locally before distributing it to regional sites. Infrastructure that would support regional food distribution includes warehouses and cold storage facilities, processing plants for grains, produce, and meats, refrigerated trucks for transportation, and kitchen equipment for value-added products. Though progress has been made through infrastructure grants, loans, and initiatives (e.g. value-added producer grants),¹⁴⁷ many smaller farms still face difficulties finding nearby processing facilities that are open to independent farmers. As the food retail sector has concentrated and

consolidated, large retail companies increasingly own and operate their own processing facilities and distribution channels, potentially reducing independent farmers' access to nearby facilities.

While there are significant hurdles that continue to deter food service administrators, farmers, and distributors from entering farm-to-institution contracts, progress has been made, as evidenced by the growth in farm-to-institution sales in recent years.¹¹ A National Conference of State Legislators (NCSL) report commissioned by the Center for a Livable Future recently found that legislation to support farm-to-school programs is increasingly popular, with 18 states enacting 28 bills on the topic between 2012 and 2014.¹⁴⁸

Several organizations and researchers have identified ways to address some of the barriers discussed above and encourage an adoption of regional procurement policies. As such, the following section focuses primarily on one perceived barrier that has not been addressed as extensively in other literature: the influence of food service management companies' contracts on institutions' abilities to procure more regionally and/or sustainably produced food. For resources that further discuss the other major barriers to regional food procurement, and ways of overcoming them, see Tools for Facilitating a Shift Toward Regional and Sustainable Food Procurement on page 31.

Food Service Contracts and the Rebate Pricing System

When institutions choose to outsource their food service to a food service management company, there are several different types of contracts they may encounter, each with their own influence on the institution's finances and procurement options. As the consumer varies, so does the payer—in prison systems and school districts, for example, at least part of the cost is covered by the government. Under some contracts, an institution may set the price that consumers are charged, leaving the management company responsible for all operation costs (retaining all income and bearing all risk of increased costs).¹⁴⁹ Under other contracts, the institution may pay a fee to a management company and also cover the company's food and labor costs, but no menu or price point is set, theoretically allowing on-site foodservice providers more flexibility in menu design and procurement.¹⁴⁹ It is important to note that there are opportunities to prefer regional and sustainably produced food under all types of contracts, depending on how the contract is written.

...institutions that have contracts with food service may face unique barriers to regional food procurement.

Still, those institutions that have contracts with food service management companies—an arrangement sometimes referred to as “outsourcing” food service—may face unique barriers to regional food procurement. Due to their size, management

companies are well positioned to obtain volume discounts from food manufacturers. Food service management companies are able to negotiate these low prices through the formation of group purchasing organizations within their procurement or supply management divisions. Management companies invite institutions to join these group purchasing organizations, and then use their collective buying power to negotiate with large food producers, integrators and distributors for volume discounts.¹⁴⁹ While institutions may choose to join group purchasing organizations that are independent of food service management companies, the pricing models are often very similar to the volume discounts obtained by management companies. In these arrangements, institutions' food purchases are often controlled and restricted to certain vendors in order to maintain group purchasing power and discounted pricing.¹⁴⁹ According to the organization Farm to Institution New England, most group purchasing organizations independent of food service management companies require their clients to buy at least 80% of their products through pre-approved vendors, a practice that is called "buying on contract."¹⁴⁹ In the case of food service management supply management, the requirements for on-contract purchases are often as high as 100%.¹⁴⁹ Food service managers have reportedly received incentives or bonuses from management companies for buying an increased percentage of their total product from approved vendors.¹⁴⁹

Food service management companies do not generate all of their revenue from management fees or revenue from individual institutions; they also profit from off-invoice Volume Discount Allowances (VDAs)—or rebates—from food suppliers.

...management companies will ask for a rebate on a certain percentage of the sales of a product, and suppliers will mark up the price by that amount so that the client—the institution—pays an inflated price, and the difference goes to the management company.

Management companies usually charge relatively low management fees, presumably in order to secure contracts with institutions, but may form agreements with distributors or directly with manufacturers and producers for rebates on their institutions' purchases. In these cases, management companies will ask for a rebate on a certain percentage of the sales of a product, and suppliers will mark up the price by that amount so that the client—the institution—pays an inflated price, and the difference goes to the management company.¹⁵⁰ For example, a distributor's sale of milk to an institution would be marked up so that a negotiated percentage of the sale would go to the food service management company, which has leverage due to its scale and volume of demand. In some cases, a percentage of the rebate that the food service management company receives is returned to the institution, but there is a lack of

transparency as to what percentage of the management company's profit is returned to the institution.

Group purchasing organizations independent of food service management companies may also secure discounts or rebates, which may be fully or partially redistributed to institutions (e.g., group purchasing organizations may withhold a

percentage of the rebate as a fee). Due to a lack of transparency surrounding the amount or percentage value of rebates and discounts, it is difficult to investigate the percentage of savings—in the form of rebates or discounts—that food service management companies and group purchasing organizations return to institutions.

These rebates have been the topic of recent investigations and growing public concern. The District of Columbia recently investigated Chartwells—owned by Compass Group USA—for claims that it fraudulently kept rebates from food manufacturers and distributors that the company was supposed to return to public school districts.¹⁵¹ In June of 2015, Chartwells paid a \$19.4 million settlement to the Washington DC school district.¹⁵¹ In 2010, New York State investigated Sodexo for similar claims, resulting in a \$20 million settlement that was distributed to the affected school districts and public universities.¹⁵⁰

John F. Carroll, the Assistant Attorney General of New York at that time, explained in a speech at the School Nutrition Association’s Legislative Action Conference that prior to 2007, it was not necessarily unlawful for food service management companies to retain rebates and discounts. USDA rules and regulations did not require that they be credited back to public school districts.¹⁵⁰ Rather, institutions could negotiate, through the terms and conditions of their contracts with food service management companies, whether the discounts received by companies would be credited to the school district or retained by the company.

In 2007, USDA promulgated a final rule on discounts and rebates that included provisions whereby all rebates and discounts were to be credited against the cost of the food, requiring food service management companies to return all rebates received back to school districts.¹⁵⁰ Importantly, this rule only applies to public school districts, which receive federal funding for food and nutrition programs.

Carroll explained that rebates and discounts were not a significant economic factor for food service management companies prior to 2000. But since then, rebates have been a large economic factor in the food service business model, and while some products’ rebate payments are typically less than 5%, other products earn rebates of more than 50% of the purchase cost for individual items. Carroll estimated that the largest food service companies earn hundreds of millions of dollars in rebates, a fact that he said is not readily apparent from companies’ or institutions’ publicly available financial statements.¹⁵⁰ Carroll noted that in his investigation, he “found that most school participants had very limited understanding and knowledge about what the rebates were.” After 2007, USDA even provided an implementation timeline to help schools rebid their food service contracts in phases to ensure that all discounts and rebates would eventually be returned, but a 2009 USDA memo to all regional and state directors of Child Nutrition Programs states that, “several instances have been brought to our attention in which the rule’s implementation timeline seems to have been misapplied, or in some cases, ignored.”¹⁵²

Carroll also described food service management companies' restrictions on the number of sources local site managers—employees working in schools—can use to purchase foods, explaining that companies “tend to restrict purchases to the larger, industrial food producing companies,” instead of smaller, regional food producers which are less likely to have the economic power to enter into rebate agreements with food service companies.¹⁵⁰ He explained, “Vendors that do not pay rebates... rarely appear on the list of approved vendors of food service companies,” and concluded that rebates have an “inherent potential to create conflict of interest”:

“In at least one instance, I observed that a local produce wholesaler had to increase the prices it charged to the local school district for fresh produce—including locally grown produce—so that it could pay the food service company a rebate. In that same market, I also observed that the local site manager found it difficult to meet ‘buy local’ requirements, which many food service contracts contain, and still comply with the food service company requirement that vendors pay rebates.”¹⁵⁰

Following this description, the implicit expectation of rebate payments to food service management companies may encourage independent regional producers to increase their prices in order to enter the institutional food service market, or—if regional producers are unwilling or unable to raise their prices and offer rebates—may prohibit site managers from being able to purchase from regional farms.

In our interview with a former Chartwells employee responsible for procuring food for a private college, the employee argued that there was “absolutely no transpar-

...there was “absolutely no transparency” around the percentage of food payments that were paid back to the food service company as a rebate.

ency” around the percentage of food payments that were paid back to the food service company as a rebate. The former employee explained that staff only heard about these “kick-backs” when the chefs complained about them, but that it was hard to learn more because sharing invoices or any information about the preferred vendors list could cost staff members their jobs, and “their own paychecks were part of the system.” The former employee argued that despite increased transparency on regional food purchases, all other institutional food purchases remain vague; ultimately, students do not, and cannot,

know how much money is going toward their food and how much is relegated back to food service companies.

A director of a private university’s institutional dining program expressed similar distrust of the current pricing system, despite positive advances in transparency. Asked about the rebates paid back to food service companies, he said, “Welcome to the gray world...they keep the keys to that safehouse so guarded that no one will ever get in.” He explained that large group purchasing organizations, which are

contracted to handle the procurement services and distribution of goods for food service companies, are “the only ones that will ever truly know the value” of kick-backs received by food service companies. He described receiving “blind invoices,” that do not disclose the actual price of food products retained by producers but, rather, the price paid, which presumably includes a built-in rebate for the food service company. According to this director, negotiated contracts should allow for increased purchasing from smaller, regional producers where “there is no kick back,” and “you can reduce that rebate dollar.” He stressed the need to educate students about the importance of buying from regional producers who follow ecologically sound, socially just, and humane practices. In addition, he argued that the consumers should understand the implications of rebates in this context and how they can pose a barrier to buying from regional producers. He emphasized that students—and other consumers in different institutional settings—should understand where their money is going.

School Food FOCUS employees reiterated that when school districts have committed to buying more food from regional or sustainable producers, those districts that have contracts with food service management companies tend to be much less able to fulfill their procurement goals than schools with self-operated food services. We spoke with one food service director of a self-operated K-12 school district that has been operating a popular unlimited fruit and vegetable program (wherein students can take as many fruits and vegetables—some of which are sourced regionally—as they wish) for nearly a decade. Without preferred vendor lists or other general restrictions on sourcing, the district has found that its procurement challenges (which include finding regional farmers who are GAP-certified and can meet the district’s high-volume needs), have become manageable and are “shrinking with time.” The program’s success—in terms of receptivity, participation, and growth—supports the idea that institutions with self-operated food services may have more flexibility in modifying their food procurement than those contracting with food service management companies.

Gaps in Knowledge

The lack of transparency described by these sources makes it difficult to assess how much progress has been made around the rebate pricing system and the procurement of regionally produced foods for institutions. As suggested by these informants, it is nearly impossible to legally access the financial records that show the percentage of food prices that is paid back to food service management companies and later paid as salaries and bonuses for site staff. Despite the barriers to these data, there are reasons to believe that the public is more aware of, and interested in, institutional food procurement practices and regionalized food systems. Governmental programs, such as USDA’s Know Your Farmer, Know Your Food, and organizations like Health Care Without Harm, National Farm to School Network, Real Food Challenge, and School Food FOCUS, which advocate for more sustainable food

procurement policies within the healthcare and education sectors, respectively, are enabling more institutions to source directly from small and mid-sized farms in their regions. Several institutions have adapted their procurement policies to designate a certain percentage of food purchases for regionally produced foods. While these initiatives do not necessarily or automatically eliminate kickbacks or reform the rebate pricing system, they do foster transparency and may lead to broader efforts to create a more equitable pricing system.

Recommendations

In our research and interviews with key informants, we identified multiple ways that individuals, institutions, and policymakers could become involved in organized efforts to adapt procurement policies and increase the purchase of regionally and sustainably produced food. Though we present specific recommendations for different audiences, we believe there is an overarching goal across efforts to increase transparency and traceability in food procurement. We will only be able to fully understand institutional food purchasing and effectively address areas needing improvement once we have accurate and adequate data to inform our decisions. Some informants suggested that institutional food procurement is “purposefully opaque” in order to deter the public’s efforts to change food service systems.

...there is an overarching goal across efforts to increase transparency and traceability in food procurement.

Whether or not the lack of transparency is intentional, we support efforts to increase public access to institutional procurement policies and records, and believe that increased transparency will lead to improved practices.

Consumers

Consumers of institutional food services—including students (and their parents), hospital employees, and government employees—have leverage with institutional administrators. They can voice their ideas independently or organize multiple consumers to form a campaign with specific requests and ideas for improving their institutions’ food procurement policies. There are existing campaigns (discussed more below) that people can bring to their institutions.

Food Service and Institutional Employees

Food service employees and decision makers within institutions can take a closer look at their contracts (if they outsource food service to a management company) and request more information on whether they must source from preferred vendors or pricing schemes. They can also voice their requests to see certain commitments made or values honored by their institution, depending on their concerns or ideas for improvement.

Policymakers

Policymakers can investigate their affiliated institutions’ policies and consider supporting legislative efforts around procurement policies that have succeeded in other states, such as Massachusetts’s mandated preference for food products grown or produced within the state.¹⁵³ The 2015 NCSL report on state legislative trends in local foods and farm-to-school provides a comprehensive overview of state efforts.¹⁴⁸ A variety of cities and counties including San Francisco, CA¹⁵⁴,

Albany County, NY¹⁵⁵; Cabarrus County, NC¹⁵⁶; Cleveland, OH¹⁵⁷; Los Angeles, CA¹⁵⁸; and Woodbury and Linn Counties, IA^{159,160} have also passed resolutions supporting regional and/or sustainable procurement.

Concerned Citizens

Anyone can support efforts to increase transparency and advocate for better procurement policies through joining their local food policy council (if one exists; check [this online directory](#) to find the nearest one to you), raising their concerns individually by writing their elected representatives or by commenting on proposed administrative rules ([this guide](#) offers some tips on understanding these processes), hosting an event in their community to raise awareness of the impact of public procurement policies, or volunteering with or contributing to civil society organizations working on these issues (see below). Food policy councils might consider supporting a model introduced by the Los Angeles Food Policy Council's [Good Food Purchasing Program](#) in their cities or communities.

Tools for Facilitating a Shift Toward Regional and Sustainable Food Procurement

Several organizations have turned their attention toward regionalized institutional food procurement and are making strides to enable institutions and individuals to influence their food service contracts and shift their focus to increased regional procurement. Farm to Institution New England, the Good Food Purchasing Program, Health Care Without Harm, National Farm to School Network, Real Food Challenge, and School Food FOCUS, along with their many partner organizations, have strategic campaigns to increase regional procurement among institutions across sectors and foster transparency throughout the procurement and contract processes. Their work, including joint efforts, has been, and will be, instrumental in facilitating a large-scale shift toward regionalized institutional food procurement.

For those interested in changing their own institution’s procurement policies or learning more about these issues, we recommend the following resources:

- ▶ Farm to Institution New England’s Food Service Toolkit, “[Setting the Table for Success](#): A Toolkit for Increasing Local Food Purchasing by Institutional Food Service Management,” offers a comprehensive overview of food service management company contracts, tools for negotiating and drafting contracts, and a variety of additional resources for several audiences.
- ▶ Healthier Hospitals’ [Healthier Food Challenge](#) offers numerous resources for hospitals and healthcare settings to demonstrate the benefits of healthier food and regional, sustainable procurement in healthcare facilities. They also have regular webinars and sharing calls open to the public. This initiative is supported by the organization [Health Care Without Harm](#), which offers additional information and guides on hospital food procurement.
- ▶ Designed by the Los Angeles Food Policy Council and since adopted by the City of Los Angeles and the Los Angeles Unified School District, the [Good Food Purchasing Program](#) supports major institutions in passing policies encouraging the procurement of food that meets criteria that support: (1) local economies, (2) environmental sustainability, (3) valued workforce, (4) animal welfare, and (5) nutrition. A variety of organizations, including the Food Chain Workers Alliance, HEAL (Health, Environment, Agriculture, and Labor) Alliance, International Brotherhood of Teamsters, and Policy Link, are working on a campaign to promote the adoption and implementation of the Good Food Purchasing Policy in other cities throughout the country.
- ▶ National Farm to School Network’s guide, [Evaluation for Transformation: A Cross-Sectoral Evaluation Framework for Farm to School](#), provides a number of outcomes to measure and document the public health, community

economic development, education, and environmental quality impacts of farm-to-school purchasing programs. This resource may also assist other institutions in establishing evaluation frameworks for their programs.

- ▶ [Real Food Challenge](#) has resources for students, food service professionals, and faculty interested in influencing their college or university's procurement policies. Its [Real Food Guide](#) is a particularly helpful resource for devising criteria for the purchase of local/community-based, fair, ecologically sound, and humane food, distinguishing between different 3rd party certification standards and characteristics of producers.
- ▶ [The Harvard Food Law and Policy Clinic](#) has published reports analyzing the potential for and implementation of specific farm-to-institution procurement policies in the states of Massachusetts, Rhode Island and Mississippi. Its findings may be helpful for other localities undergoing implementation and evaluation of procurement policies. Its "[Tools for Advocates: Increasing Local Food Procurement by State Agencies, Colleges, and Universities](#)" guide provides a general overview of actions to take to develop and implement farm-to-institution programs.

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Conclusion

A large-scale shift among hospitals, schools, universities, and other public institutions to procure regionally and more sustainably produced food has the potential to change the U.S. food system substantially. The vast purchasing power and educational opportunity provided by institutions for assisting in this transition remains to be tapped.

While the prevailing model of institutional food service—marked by contracts with group purchasing organizations and food service management companies, rigid lists of preferred vendors, and little transparency about the origins of food products or the conditions under which they were produced—may seem deeply entrenched and difficult to change, it is important to recognize that this model is relatively young and is quickly adapting to demands. In fact, only since 2007 has the USDA prohibited federal funds (in the national school lunch, school breakfast, and special milk programs) from being used to cover rebates from vendors to food service management companies.¹⁵² Recent litigation has shed light on the continued problem of kickbacks—or rebates that are kept by food service management companies—and will likely encourage consumers and institutions to keep a close eye on their contracts, and companies to re-visit their rebate systems.

By highlighting the socioeconomic, environmental, health, social justice, and animal welfare impacts of the current food system and the potential benefits that could come from transitioning to a more regionalized and sustainable one, this report seeks to inform the development, implementation, and education surrounding better institutional food service procurement policies. We encourage institutional policy advocates to accurately reflect the existing research in order to avoid misrepresenting the impact of their efforts and inadvertently harm the benefits that they could provide.

We encourage the variety of efforts aiming to transform procurement policies and food service contracts, and further believe that individual groups' efforts are strengthened by coordination and collaboration. By merging efforts across institutions and sectors and educating people about the potential benefits of regional procurement on the environment, human health, animal welfare, and social justice, the prevailing food procurement model could be sufficiently challenged, and the transition to regional, sustainable procurement policies adequately supported.

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