Bridging the Gaps

Funding and Social Equity Across the Food System Supply Chain

August 2012

Kyle Foley • Taryn Goodman • Bridget McElroy

rsfsocialfinance.org

RSF Social Finance

Bridging the Gaps

funding and social equity across the food system supply chain

This report could not have been completed without funding and support from the Rockefeller Foundation. The final findings, analysis and recommendations were built on the experiences and insights of investors, entrepreneurs, network and thought leaders who were generous enough to share their time with us. See Appendix for a complete list of participants.

INTRODUCTION

A dearth of fresh food in urban and rural neighborhoods. Overworked and underpaid farmworkers. Water contaminated by pesticides and concentrated animal feeding operations (CAFOs). The news today is filled with stories related to rampant problems in the U.S. food system. Yet, there are also a rising number of stories about positive change in the food system on a regional level: farmers' markets popping up in inner-cities to sell organic, fresh food from small and mid-sized farms; public schools connecting to regional farmers for fresh healthy food; and immigrant farm workers becoming farmer-entrepreneurs.

How do we increase and expand the actions being taken to reinvent and restore a food system, one in which people and the environment are valued first and foremost?

Funding is needed to move a more sustainable food system forward and to support the organizations and businesses working to affect this change. Just as the creation and rebuilding of a healthier food system will require creative and innovative solutions, so will the capital needed to support those solutions.

What's the problem with our current food system?

It is becoming impossible to ignore the health, social, and environmental problems that have arisen as the food system has become increasingly industrial and centralized. Just as food is a necessary part of daily life, the issues associated with food are now equally present and challenging reality.

The current food system has contributed to a U.S. population suffering from an obesity crisis reaching epidemic levels (with over two-thirds of adults overweight or obese), along with an increase in other diet-related chronic diseases such as diabetes. Furthermore, these serious health problems are disproportionately affecting low-income people and minorities, and are increasingly affecting children at unprecedented levels. Waistlines have expanded as cheap, convenient, processed foods have been increasingly marketed as acceptable nutrition, while there is a simultaneous lack of access to fresh, healthy, affordable food in many low-income, underserved rural and urban neighborhoods. While the food we eat is not the only factor in the increase of serious health issues, availability of healthy food is the cornerstone for building a strong foundation for healthy people and healthy communities.

In addition to the negative effects of the food system on consumers, U.S. agri-business is also degrading the health of our environment. Fields are losing unprecedented amounts of topsoil through erosion due to a lack of conservation farming practices, and widespread, chemical-dependent monocultures of corn, soy, and wheat are contributing to a major loss of biodiversity. The dominant agricultural methods are also polluting our waterways through chemical runoff and leaching. These methods require enormous amounts of water to irrigate crops, which is becoming an increasingly pressing issue as more and more water-intensive fruits and vegetables are grown in arid environments like California and the Southwest.

Environmental degradation and exposure to agricultural pollution most strongly affect rural, agricultural communities and those working and/or living on farms. Farmworkers suffer the greatest in terms of exposure to pesticides, as labor laws are often skirted on large, industrial farms, and regulations for the safe use of pesticides are ignored. The Center for Disease Control and the Environmental Protection Agency estimate that 10,000 to 20,000 physician-diagnosed pesticide poisonings occur each year; since many farmworkers do not have insurance and therefore cannot afford regular medical care, this number is most likely grossly underreported. In addition, the "undocumented immigrant" status of more than half the farmworkers on crop farms encourages some farm owners or operators to commit labor and health and safety abuses without reprisal from fearful employees who often do not understand or exercise their labor rights.

Corporate control of the agriculture industry in the U.S. has been increasing in the past several decades, and there has been extensive consolidation across the entire food system, from the seed industry to food processing, to meatpacking. Through economies of scale and a lack of accountability for negative externalities, the larger players have consolidated and concentrated, resulting in higher entry barriers for small and mid-sized farms and businesses in the supply chain. This has led to what might be characterized as a less than competitive market space, even recently leading the U.S. Department of Justice to investigate anti-trust enforcement issues in the agriculture industry. According to a report by Green for All entitled *Green Jobs in a Sustainable Food System*, four firms are responsible for slaughtering more than 85% of the beef cattle in the US, two companies sell half of the corn seed and one company controls 40% of the milk supply. The concentration and consolidation in the food system has contributed to the deterioration of rural agricultural communities and agricultural infrastructure in many regions as smaller farms have been swallowed up by larger ones and infrastructure has adapted to the industrial system or disappeared.

All of these complex factors play a role in the current state of our food system, which is leaving a trail of unhealthy people, communities, land, and water in its wake. Fortunately, there is increasing attention paid to these problems and the effect they are having on Americans and our environment. In response to the degradation of the food system and its consequences, many farmers, communities, organizations, and businesses are dedicating time, money, and effort to fixing the inherent problems and creating a new system that is healthier for people, restoring the land and fostering new communities.

What should the food system look like?

Addressing the environmental, social, and economic issues that plague our current system means creating alternatives or changing the food system into one based on sustainable agriculture, food security, good health, good jobs and community economic development.

In a sustainable food system everyone has equitable access to healthy, fresh, safe food. This requires sufficient production of healthy food in every region of the U.S.; widespread distribution systems to ensure adequate physical access to food; nutrition assistance for low-income families; education about basic nutrition; and changes in food preparation and consumption habits.

Agricultural production in the ideal vision of a sustainable food system minimizes negative impacts on the environment, restores soil health and biodiversity, uses inputs efficiently, and ensures fair treatment, clean and safe housing, health care, and living wages for workers. Agriculture should also contribute to vibrant communities by keeping land in working farms, sustaining economic development, and providing employment for current and future generations. Beyond agricultural production, strong rural economies must also have infrastructure for aggregation, processing, and distribution in order to ensure that farmers have access to regional markets and that consumers can access the food being produced near where they live.

Furthermore, the business environment in sustainable food systems must be one of fair competition at minimum, with access to information, markets, and business planning assistance. It is also one in which all costs of food production, including negative environmental and social externalities, are adequately accounted for in the form of fair prices that reflect true costs.

To achieve this vision of the food system, two parallel tracks are being pursued. Sustainable food system proponents are working on funding the creation of alternative food system solutions that are inherently just and sustainable. In addition, funders and advocacy groups are also directly addressing the problems within the current industrial system by funding advocacy work and policy changes to address abuses (to laborers, downstream communities, animals, the environment, etc.).

What does this report address?

This report examines the current state of funding for addressing the problems in the food system and promotes the goals and the vision for a healthier food system as described above. Specifically, it looks at where capital is flowing and where it is *not* flowing, and what kinds of approaches are needed to increase the flow and effectiveness of capital where gaps currently exist.

The picture of a healthy food system in the U.S. does not look the same in every region, although the whole system would ideally incorporate values of sustainability, fairness, and justice as outlined above. To reach this goal, every region has to work with different needs depending on demographics and geography. Given this diversity, and the array of organizations, businesses, and funders that are working in different regions, the capital solutions vary. In some regions, impressive progress has been made toward food system change, but barriers for investing capital in market-based solutions remain, particularly in the middle of the supply chain as it relates to processing, aggregation and distribution. To achieve significant and lasting change, more capital is needed in more diverse and creative forms. This includes capital to support critical efforts to develop and lay the groundwork for viable markets that will attract investments. It also requires support to improve collaboration and strategy around food system funding.

Other reports and research on financing different aspects of the food system have been published. Each looks at this issue from a unique angle, whether providing advice for funders, assessing the regional resources, or addressing the needs of certain parts of the supply chain. This report adds to the conversation by looking broadly at the gaps in funding that exist across the supply chain on a national level, explores more closely how they impact social equity issues, and provides possible solutions to increase the flow of capital. This will help funders interested in supporting a more just and sustainable food system to design targeted, high-impact, and effective funding strategies. Outlined below are some examples of other reports addressing food system funding issues that can serve as helpful resources. A complete list of references and related resources can be found in the appendix.

- The SpringCreek Foundation report, "Promoting Sustainable Food Systems Through Impact Investing," explores the current state of impact investing opportunities and creates a framework to help investors understand the sector.
- The California Environmental Associates report, "Local Foods: A Guide for Investors and Philanthropists," is a broad overview of the state of local food systems and the range of investment opportunities that exist--from grants to equity. It also includes an inventory of possible capital solutions for each part of the supply chain.
- The Sustainable Agriculture and Food Systems Funders (SAFSF) has reported on results of their surveys to their network of funders (including one report in 2007 on "Trends in Sustainable Agriculture and Food Systems Funding"), which include valuable information that is primarily focused on capturing the state of grant funding for the field.
- The U.S. Treasury's CDFI Fund completed a report in 2011 ("A Food Systems Overview") that scanned the food system investment opportunities specifically for CDFIs.
- The Vermont Sustainable Jobs Fund's "Farm to Plate Strategic Plan" includes a chapter on "Financing the Food System," that provides an in-depth look at the current funding situation in Vermont. It lists resources for food system entrepreneurs seeking funds for their ventures, and explores models that are emerging to finance the development of a sustainable food system in that state.
- Specific reports on financing for small and mid-sized farmers have been published by the W.K. Kellogg Foundation's Food and Community Program (for example, "Financing Farming in the U.S.," in 2010), as well as by The Carrot Project (for example, "Small Farms in a Changing Credit Landscape," in 2010).
- The Fair Food Network produced a report from a March 2010 convening that gathered information to inform potential investments in sustainable food systems. The report, "Leadership and Investment for Community-Based Food Systems," looks at areas of innovation in food system development and funding, and identifies key resource needs for community-based food system work.

Research Methodology

Interviews for this report were conducted over the course of three months with 54 organizations working to build a sustainable, fair, and just food system. The primary goal of the interviews was to find out how the interviewees' work is being financed, where funding is going, where funding is *not* going, and what factors are influencing the flow of capital to different sectors of the supply chain. Each interview was conducted using a set of qualitative, open-ended questions tailored to the type of organization being interviewed and included four categories encompassing the different stakeholders working to address food system issues. Interviewees included intermediaries, network leaders, funders, and entrepreneurs. All interviewees were given an overview of the research goals before the interview began. The appendix includes a list of interviewees and their geographic regions as well as a combined list of questions asked of each kind of organization.

In addition to the interviews, surveys were conducted to examine both the awareness of social equity issues and their inclusion in the investing practice. The surveys were completed by 55 investors and 20 entrepreneurs across the funding spectrum and supply chain. For investors, the survey asked about funding vehicles, annual funding budget for sustainable food and agriculture (excluding grants), areas of evaluation for impact, and needs to increase funding going toward the sector. For entrepreneurs, the survey asked about capital raised to date, funding vehicles for capital raised, investor impact interests, current sustainable practices, and what they believe is needed to increase funding for the sector. A copy of this survey can be found in the appendix.

In addition to the interviews and surveys, we reviewed existing reports and literature related to sustainable food system development and financing. These included research reports, conference reports, data sets, and other publications by foundations, non-profits, the Federal government, universities, and food system consultants.

THEMES, BROAD TRENDS, AND BARRIERS

Sustainable food system development is currently gaining increasing interest within the funding community including foundations and angel investors who are working to align their values with their capital. A survey completed by the Sustainable Agriculture and Food System Funders Network in 2007 found that funding to food and agriculture by the ten largest foundations (by dollar amount) had more than doubled since 2003. Although exact funding amounts by the largest foundations are not available, membership in the network has continued to grow to 69 in 2012 from just 16 in 2003, highlighting an increasing interest in funding this sector.

Throughout different regions of the country there is a diverse range of businesses, organizations, funders, and networks supporting efforts for food system change. As a result, capital is flowing into the sector through different mechanisms, depending on the region and the focus of the organizations and businesses involved. While the efforts are regional, broad trends that span regions and sectors of the supply chain emerged through this research.

Currently, public and private grants are the primary source of capital for organizations working on both changing the mainstream system and on developing and strengthening alternative food systems, especially in the start-up stage. Of those interviewed, 65% of respondents noted either using or receiving grants to finance food and agriculture enterprises. For-profit businesses working within alternative food systems are also receiving grant money, which is vital for early-stage planning and development costs, especially for businesses that have high fixed costs. Lending by organizations such as community loan funds, CDFIs, philanthropies, and public institutions also stand out as important types of capital going to both non-profit and for-profit sustainable food businesses (including farms), although much more is needed.

A need for additional funding was identified by nearly all stakeholders. However, key barriers blocking the flow of capital to the sector and to social equity issues were analyzed and criteria were identified around what will increase the deployment and effectiveness of capital. Below is a description of those opportunities.

Strong food system foundations must be laid: Before sustainable food systems can be strategically and adequately funded, it is crucial that certain building blocks be put in place and strengthened, including:

- Technical assistance to increase the business acumen of food system entrepreneurs
- Opportunities for collaboration and coordination among funders and entrepreneurs
- Education around and transparency into the social inequalities across the food system supply chain
- Identifying how to appropriately finance businesses in the sector

Strategic capital placement: Creative capital solutions are needed to meet the diverse needs of the food supply chain including:

- Syndication on investments to address different levels of risk inherent in investing in the sector
- Community-based investing to address regional-specific needs
- Alternative financial vehicles that address and/or are tied to social justice outcomes, seasonality, and that recognize the slim margins that are inherently part of food and agriculture

FLOW OF CAPITAL TO THE SUPPLY CHAIN

There is increased interest among values-driven investors in funding food and agriculture. When asked about current funding outside of grants, over 42% of survey respondents noted that they are putting up to $100,000 to work across the supply chain on a yearly basis, and over 30% responded that they are putting $100,000 to $500,000 to work annually.

This funding is being provided in many forms, however over 65% of interviewees reported having used grants to fund businesses across the supply chain. Respondents are also heavily relying on debt, both senior and subordinated, and intermediaries to fund businesses (See Exhibit 1).

EXHIBIT 1: HOW HAVE YOU SUPPORTED SUSTAINABLE FOOD & AGRICULTURE BUSINESSES?

Grants	65.2%
Through Intermediaries	52.2%
Debt	43.5%
Equity	8.7%

While the above data cuts across all aspects of the supply chain, research was also conducted in three specific verticals in an effort to decrease complexity:

- Production – Entails the growing or raising of fruits, vegetables and animals for consumption. This also includes products used as inputs for processed foods and animal husbandry such as corn.
- Processing, Aggregation, and Distribution – Includes the collection of food products from the production outlets; the preparation of raw food into consumable products; and the delivery to retail facilities for consumers.
- Retail and Consumer Access – Involves all outlets where food is sold for consumption including farmers' markets, grocery stores, and restaurants.

Interviewees noted that the two main areas of the supply chain where funding is most needed are production and processing, aggregation and distribution, with 62% of interviewees pointing to a need for the latter. The three sections below identify national trends in each aspect where financial support is flowing and where it is not.

Despite the clear divisions of where capital is going and not going as laid out below, it is important to keep in mind that the food system is complex and interconnected, and is certainly not black and white in terms of where money is flowing. The gaps identified by this report stand out as being trends nationally, but there are distinct differences across regions, states, and communities. In making decisions about where to direct funding, it is important to be conscious of the regional trends of the food system. For example, there are enormous differences in terms of the progress that has been made to rebuild sustainable food systems in an underserved region like the Mississippi Delta and a hub of innovative food system activity like Northern California.

PRODUCTION

Regional, small to mid-sized farms producing healthy, sustainably grown food are the critical starting point for building robust sustainable food systems. They are essential to our nation's health, economic development, food security, cultural traditions, and environment. The 2007 Census of Agriculture counted 2.2 million farms in the U.S., a 4% increase from 2002. (USDA, 2007) This includes a small increase in the number of small farms, but the growth mostly reflected an increase in large, industrial-sized farms with sales over $500,000 per year. Meanwhile, the number of mid-sized farms have been decreasing as has the total number of American farmers, has declined from 6 million in 1910 to just over 2 million in 2007. (USDA, 2007; NYFC, 2011)

Despite this increase in small farms in the U.S., the conventional agricultural system still dominates the production sector across the country. Over the last century, global competition in agriculture has led to enormous consolidation and geographic concentration of agricultural production. Currently, most of it is concentrated in a small number of large, specialized, intensive farming operations. In fact, only 5% of total farms account for 75% of all agricultural production in the U.S. (USDA, 2007) And, 60% of farms produce only one or two commodities. (Hanson et al, 2006) These farms, while highly productive, are not environmentally, economically, or socially sustainable and are dependent on government subsidies. Their operations and production practices cause land and soil degradation, loss of biodiversity, pollution of water and the environment, and threats to the food security of local communities. They are also associated with limited employment opportunities, unfair treatment of workers, and the decline of rural economies.

Predominant wisdom in the agriculture sector has long been that larger farms are more profitable due to economies of scale and price efficiencies associated with the size of their operations. However, throughout the country in recent years, there has been an increase in profitable, smaller-scale, diversified farms that are operating in more localized markets. (Cocciarelli et al, 2010) These small and mid-sized farms are forming the backbones of sustainable, regional food systems. They are important because they provide good food for their communities, preserve landscapes and working farmland, create jobs and support rural economic development, and, most important, many of them value long-term stewardship of environmental, financial, and human resources.

Increasing production by small and mid-sized farms to support their particular region can increase the supply of a variety of healthy, sustainably produced foods in close proximity to the communities where it is to be consumed. Recent studies have suggested that increased availability of these foods can improve community health outcomes. (Conner and Levine, 2007; Martinez et al, 2010; Thompson et al, 2008) Increasing the viability of small and mid-sized farms leads to a vibrant agricultural economy with more farmers and local jobs, keeps money spent on food circulating in the community's economy, and preserves working farmland for food production. Compared with mainstream production systems, production on these farms reduces the effects of energy use, greenhouse gas emissions and other off-site environmental impacts on communities. It has also been suggested that more local, decentralized, small-scale food production can reduce food safety risks for consumers. (Peters et al, 2008)

The decline in number of farmers as indicated in the 2007 census is correlated with consolidation of farms, the arduous hours and small margins associated with farms and with the high costs related to becoming a beginning farmer. Farmworkers coming from agricultural backgrounds prior to immigration to the U.S. gain experience working on farms and may then gain the desire and capabilities to run their own farms. However, these workers are unable to capitalize on their skills or eventually own their own businesses. In fact, any sort of job progression beyond being a farmworker is rare as there are very few management opportunities. As such, farm workers are limited to minimum wage positions for years and are unable to earn enough to finance their own farms. If this pattern could be reversed through funding and other support for access to land, they could easily fill a gap in the marketplace.

In order to strengthen regional food systems and make certain that our food needs can be increasingly met by small and mid-sized farms, we must ensure those that already exist remain in operation and can access the resources they need to scale up food production. Additionally, funders and regional community stakeholders must facilitate the establishment of new small and mid-sized operations by farmers that are producing food for their communities.

Where Funding is Going

Small farms doing direct farm-to-consumer marketing

On a national scale, much of the capital flowing into the production sector is going to existing and new small farms doing direct farm-to-consumer marketing. Sales channels for these small farms include community-supported agriculture (CSAs), farmers' markets, farmstands, as well as direct sales to local restaurants, grocery stores, and cooperatives. Along the spectrum of funding supporting production, there is a particular emphasis on capital for foundational needs on farms such as specific types of production, including:

- Equipment (tractors, manure spreaders, etc.)
- On-farm projects (value-added enterprises, conservation)
- Infrastructure (small scale storage, greenhouses)
- Specialty crops (fruits, vegetables, nuts)
- Organic or sustainable production (across all sectors—dairy, produce, meat, legumes and grains)

Capital is being used to support production through a number of different mechanisms. Small, patient loans, grants, and the investment of resources by non-profits providing services to farmers are most common. This capital is typically deployed through small agricultural loan funds, state-level USDA programs, and non-profits.

Two examples of such funders include The Carrot Project and The Shade Fund. In New England, The Carrot Project administers four programs designed to make loans to small and mid-sized farms and farm-related businesses that use sustainable or organic practices, and that serve local or regional markets. Most loans are $35,000 or less, and can be used for things such as equipment purchase or upgrade and infrastructural projects. In the Southeast region, The Shade Fund supports farms that use natural resources sustainably with loans that range from $5,000 to $50,000 for equipment and on-farm infrastructure. The Carrot Project and The Shade Fund programs are unique in that loans can also be used for working capital.

The Carrot Project and The Shade Fund are both capitalized by individuals who have invested with them in order to enable their work. Significant resources are also available from Federal and state programs in the form of loans that are generally larger and have stricter eligibility requirements.

There are also some programs that address the needs of new and beginning farmers by offering loans as well as training. For example, the national Farm Credit System runs the Young, Beginning and Small Producers Program, which provides these groups with agricultural loans. In 2010, average loan size ranged from $84,000 and $157,000 across the three categories. Viva Farms in Skagit County, WA offers farmer training for organic production, and then leases land to starting farmers and connects them to markets to sell their produce. Once farmers are financially strong enough to purchase their own land, Viva helps them find funding from local CDFIs. The majority of farmers that they serve are immigrants who do not have access to this type of training and financing. In order to support its operations, Viva Farms has been funded with a combination of grants and a PRI loan from RSF Social Finance.

Gaps in Funding

Access to capital remains a chief obstacle for both existing and start-up small and mid-sized farms. (Carrot Project, 2008; Cocciarelli et al, 2010; Moukad, 2010; NYFC, 2011) This is partly due to the fact that, while capital is flowing to certain areas, the overall need is still greater than what is available. Gaps where there is a huge need for increased funding include:

Technical assistance for producers

Increased funding for technical assistance to educate producers about capital and resources, strengthen business planning and management capacity, and to assist producers in navigating and applying for existing funding opportunities would increase the flow of capital to the production portion of the supply chain.

- **Outreach, education, and awareness to increase producer utilization of technical assistance services.** Understandably, both farmers and fishermen are focused primarily on production and have little time to devote to improving their business planning and management skills. An important foundational step toward increasing the flow of capital to food production is to make producers aware of technical assistance services where they *are* available, as well as increasing understanding of the important role these services play in opening doors to capital. Without this raised awareness, efforts to provide support for business planning and access to capital will be underutilized and ineffective.

  Education for producers around the basic concepts and strategies for small business financing is also needed. Those technical assistance and financial service providers that do work with farmers find that a lack of understanding of financial mechanisms, especially debt, makes farmers reluctant to use mechanisms like debt to support the development of their businesses. For producers, both new and established, taking on debt can be daunting. This is particularly true for smaller operations, farms already carrying debt, farmers with poor personal credit, or those who lack personal capital or an equity base for a guarantee. Education and awareness can empower farmers to address these barriers and make smart financing decisions.

- **Navigating the application process.** In regions where capital may be available, there is still a gap in terms of producers knowing how to access that capital. Organizations and funders that provide support to farmers report that producers are often unsure of where to seek out capital or how to navigate the process of applying for loans or grants (especially from USDA's significant pool of funding). Again, similar issues have arisen for those working with fishermen to help them access capital.
- **Support for business planning and management.** There is a consensus that producers need specialized business support to help them become more attractive candidates for capital in the eyes of funders. Those working to support small and mid-sized farmers who supply local and regional markets find that not all farmers see themselves as business-people or business owners. They have also found that farmers don't necessarily know how to appropriately prepare and present their operation as a business to a lender or investor. Meanwhile, lenders are highly concerned about the riskiness of agricultural lending, further broadening the gap between farmers and lenders. To close this gap, farmers need business management support and information that will give them the capacity to alter this perception by strengthening their operations and working effectively with funders. Similar support for fisheries is also needed to create more opportunities for capital to flow into the sector.

Access to and preservation of working farmland

In scaling up sustainable regional food systems, land is and will remain the most critical element of production. Despite the existence of some land access programs and a small number of programs working with underserved farmers, capital to support this work remains limited. In addition, the scale of capital needed to purchase land is far greater than that needed to support business operations. Funding needs around access to farmland include:

- **Purchasing and leasing land.** The biggest challenge to farmers in accessing land is the divergence between rapidly increasing land prices and the modest incomes and assets of the typical farmer. (NYFC, 2011) In many cases, farmers looking to enter or expand production for local or regional markets are beginning, small-scale, young, and/or minorities. Among those most challenged in accessing land are minority farmers. Across the country, minority farmers have faced historic disinvestment and discrimination; both have created enormous social and economic barriers to accessing capital for land.

  For all farmers, increasing land prices push the possibility of land ownership beyond reach. Between 2000 and 2011, per acre farmland values doubled, significantly affecting the price of purchase as well as rental rates. (USDA 2004, 2010) These increases are a result of competition from alternative uses of the land. For example, in the Upper Midwest, demand for farmland to produce ethanol is making it unaffordable for farmers to access land. In more densely populated regions, such as California and the Northeast, land prices are influenced by the demand for development, especially in peri-urban areas. For instance, in the Northeast, farmland values are five to ten times the national average. (Henderson and Akers, 2011) And, while land in rural areas is often more affordable, a lack of regional agricultural infrastructure in many rural areas creates significant obstacles for small farmers in moving their products to market.

- **Preserving working farmland.** Farmland preservation is being addressed by some non-profits (through land trusts, grants, supporting agricultural easements, etc.) and also by local governments (through the purchase and transfer of development rights, zoning and agricultural districting, grants, etc.). However, a significant deficiency in money to support this effort exists and the need promises to become greater as land prices continue to rise. Farmland for sale can fetch a much higher price if sold to developers rather than farmers for those seeking or needing to maximize the equity in the land for retirement for estate purposes. This fact promises to pose an enormous challenge to preserving farmland as an estimated one quarter of today's farmers will retire and sell 400 million acres, or 70% of national private farm and ranch lands, by 2030. (Kohn and White, 2001) The issue of preserving farmland is greater than just ensuring that farmers have a way to make a living. Loss of farmland to development, pollution, and degradation is also a challenge to our country's food security, health, natural resources, and economy.

Micro-capital for small farmers

Across the country, farmers are in need of flexible micro-loans (between $500 and $5,000) to meet capital needs for operations, capital expenses, and emergencies. Micro-loans are often critical to helping farms scale up and grow, purchase equipment or materials, or make small on-farm changes that enable them to access new markets. Even more so, there is a need for working capital on farms to address cash flow challenges. The need for micro-capital exists across the country and has been highlighted in reports such as one recently published by the National Young Farmers Coalition. (NYFC, 2011)

An important reason for this gap in capital is that farmers often have difficulty obtaining this type of credit from more traditional lenders, including banks and many of the Federal and state programs that exist. Generally, for these lenders, the typical loan size, criteria, and other measures are designed around larger, less diverse operations, and not the farms that are serving sustainable regional markets.

Bridging the Gaps

In order for regional, sustainable food systems to flourish, attention and funding needs to be provided to small and mid-sized farms to create viable, mature business models, farmland purchasing and leasing, and small infusions of capital for operations. Unfortunately, funding gaps exist in these areas due to the limited return potential, high risk profile and lack of liquidity surrounding these investments. Often investors do not understand small and mid-sized, diversified farm businesses, and many institutions do not have agricultural lending personnel focused on producers (as was the case when agricultural economies were more decentralized around the country). Micro-loans, while greatly needed, are largely unavailable from both traditional and alternative lenders because, despite the need, this type of lending is not a profitable business. There is a need for patient capital—capital that seeks to maximize impact, has a higher risk tolerance and that has a long-term time horizon— in addition to funding vehicles that fit these types of businesses.

PROCESSING, AGGREGATION, AND DISTRIBUTION

Aggregation, processing, distribution, and other services that connect the dots between food producers and consumers comprise the middle of the food system supply chain. These connective pieces must be in place if regional supply chains are to provide reliable pathways to market outlets for small and mid-sized producers and sufficient, affordable healthy foods to nearby consumers.

In order to preserve regional agriculture on a larger scale, to allow for sustainable farming practices to continue, and to give a wider number of consumers access to regional, healthy food, we must create regional supply chains that adequately serve the needs of small and mid-sized farmers. Processing (i.e. washing, grading, etc.) and storage infrastructure allow farmers to meet the standards required by wholesale buyers for food safety, quality, and consistency. Aggregation and distribution services make it possible for producers that operate farther away from population centers to access those larger markets.

Currently, all but the largest farms have difficulty accessing the large-scale supply chains that move product around the world, and mid-sized farmers face particular problems in finding market outlets. The goal is for regional supply chains to take and modify the best efficiencies and aspects of larger, global supply chains to create smaller-scale, shorter versions. These regionalized systems can address the failures of the larger supply chains such as poor wages and mistreatment of workers, low prices for farmers, and high barriers to entry for small and mid-sized farmers. (Clancy, 2010; Day-Farnsworth, 2009)

Processing, aggregation, and distribution infrastructure on a regional level allow small and mid-sized farms to access the larger retail and institutional markets where general demand for food is constant. (CISA, 2011; Clancy, 2010) This issue of access to markets is especially important for mid-sized farms that can provide a larger volume of food to wholesale outlets and that have less of an ability to rely only on direct-to-consumer sales through farmer's markets and CSAs.

Currently, local food sales appear to be highest in urban areas, with more than 80% of the small farms selling food on a local level being located in metropolitan counties or counties adjacent to metropolitan areas. (Low, 2011) Land in urban and peri-urban areas is more expensive than in rural areas, which creates high food transportation costs or forces them to locate closer to urban areas and thus be affected by these high land prices.

While direct-to-consumer sales can put the whole retail dollar back into a farmer's pocket, it can also mean a lot of time spent off-farm – for example, working at farmers' markets or delivering directly to restaurants. (King, 2010; Martinez, 2010) In one USDA study, costs incurred (for transportation, marketing and promotion, labor) by farmers using direct-to-consumer strategies ranged between 13-62% of the retail price of their products. If aggregation and distribution were available to farms on a regional level for reasonable fees, farmers could spend more time on-farm and decrease the costs of time spent on the road or working to sell their products.

If regional supply chains can be kept short and provide as direct a connection as possible between producers and buyers, it is possible for producers to retain a higher portion of the retail dollar than they could in a large-scale supply chain. (Cantrell, 2010; King, 2010) The short, regional supply chains being built around the country are specifically focused on creating systems that give farmers a fair price and on creating more communication through the chain between producers and buyers. This can lead to more relationships and trust between producers and the businesses buying their product, as well as greater understanding of the needs on both ends of the supply chain.

Creating infrastructure in rural, agricultural areas can also provide economic development opportunities and job creation. For example, a report by the Vermont Sustainable Jobs Fund estimates that a 5% increase in food production (and its effect on associated processing, distribution, retail and other food system businesses) would generate roughly 1500 jobs within the state, as well as an additional $135 million in annual product output. (VSJF, 2011) There is the potential to repurpose defunct manufacturing, processing, and other infrastructure in rural areas, as well as the potential to generate or support other businesses that produce related equipment and inputs. (Cantrell, 2010; CISA, 2011; Martinez, 2010; VSJF, 2011)

Where Funding is Going

The capital flowing to aggregation, processing, and distribution includes a range of mechanisms, traditional and innovative forms of debt, equity investments, and grants as follows:

Linking small farmers to regional and local markets

Money is flowing to the promotion, coordination, and creation of direct-to-consumer opportunities for small farms. Direct sales refer to farmers selling their products directly to consumers, restaurants, retailers, or institutions, rather than using middlemen. (Martinez, 2010) Examples of direct sales are farmers' markets, community-supported agriculture programs (CSAs), farmstands, and sales via the internet/mail order, etc. Grant funding from the government (state and Federal) and foundations has been going towards direct marketing efforts in a variety of ways, but is primarily flowing towards organizations creating market opportunities and helping farmers connect with those opportunities. For example, funding is going to non-profits to help them establish and organize farmers' markets in their communities and regions. Most states in the U.S. now have independent, non-profit farmers' market organizations that manage and support the markets within their state, as well as monetary or technical support from many state departments of agriculture. Funding is also going to organizations that are helping connect farmers directly to restaurants (e.g. the national organization Chef's Collaborative), promoting local purchasing of food directly from farms (e.g. LocalHarvest.org), or providing outlets for farmers to sell through the internet (e.g. Farmigo.com). Non-profits doing this work are mostly receiving grant funding, and the businesses approaching these issues are being financed with various forms of debt and equity. This attention to a direct connection between farmers and consumers is a reaction against the opacity of the industrial food system and the lack of information consumers have about how food is produced.

Appalachian Sustainable Development, based in Abingdon, VA, is a non-profit with a variety of programs. One of the goals of their sustainable agriculture programming is to improve direct marketing opportunities for growers. The organization runs the Appalachian Farmers Market Association, which promotes and builds demand for the participating farmers' markets, provides educational and technical support to the market vendors, managers, and customers, and helps new markets get off the ground. ASD also runs Appalachian Farm to Family, a cooperative of meat and egg producers. Customers place orders online and the producers make monthly deliveries. Many other programs similar to these are popping up around the country, primarily supported by grants for operating support.

The USDA has also been involved in promoting direct marketing and has created a Federally-funded agency-wide program called "Know Your Farmer, Know Your Food" (KYF2) that is intended to strengthen local and regional food systems. The program's mission is being carried out through promotion of direct marketing opportunities for farmers and consumers. KYF2 also provides an online compilation of resources, including information on how farmers can access grant and loan support from the USDA through options like Farmers Market Promotion Program grants (as large as $100,000) or the Community Food Projects program (1–3 year grants ranging from $10,000-$300,000).

Finally, individual state departments of agriculture have also actively promoted their local agricultural systems through state-funded branding and marketing programs that encourage consumers to purchase food produced within the state. Examples are found all over the country, such as Commonwealth Quality (in MA), From the Heart of Washington, and Virginia Grown.

Farm to Institution

Demand for local/regional, fresh, healthy food for schools, hospitals, universities, and other large institutions is strong and growing across the nation. The number of farm-to-school programs alone rose from 400 in 2004 to 2,095 in 2009, according to the National Farm to School Network. (Martinez, 2010) Across the country, funding is primarily going to non-profits who are running programs addressing all aspects of farm-to-school: building demand on the institution side for local, fresh food; working with farmers to increase their capacity to address the needs of schools and institutions; making connections between farms and schools to start pilot programs; and addressing logistics and distribution issues.

Equally motivating is the potential this approach has for expanding access to this food for a large number of people. (Joshi, 2006) Over 31 million children were receiving meals through the National School Lunch Program in 2010, so there is enormous potential to reach a large population of children in need of healthy, fresh food options. (FNS, 2011) Farm-to-school initiatives make free or reduced-priced meals available to children, who might not otherwise have access to such food.

A variety of organizations are testing out different models to make farm-to-institution work. FamilyFarmed.org has helped facilitate the purchase of more than $3 million worth of fruit and vegetables from regional farms by the food service provider Chartwells for the Chicago Public Schools. FamilyFarmed.org built relationships with both regional farmers and large institutions like Chartwells, bringing the two sides together to establish business partnerships for successful farm-to-school programs.

Common Market is a non-profit processor, aggregator and distributor based in Philadelphia that delivers to various school districts in Pennsylvania and Delaware. They source from local farms. They expect to deliver to almost 200 schools, hospitals, grocery stores and other institutions this season. Common Market has received grants from local foundations and the Kellogg Foundation, as well as a PRI loan for working capital from RSF Social Finance.

Value-added food businesses

The sustainable food movement has resulted in many value-added food enterprises starting up around the country. These businesses have been the focus of investment from the organized socially responsible investing community, the government, and other funders. Two kinds of businesses are receiving the most support. One is the hyper-local business, dedicated to supporting its community's farm economy by sourcing raw product locally, producing a high-quality, often-handcrafted product, often with little intention to grow the business. These businesses are using crowd-funding (for example, Kickstarter.org) or are seeking out local investors through groups like Slow Money to find the small grants and debt loans that they need.

On the other end of the spectrum are companies with bigger growth trajectories focused on value-added organic and sustainably-produced food products, but without an emphasis on sourcing from any particular place. These businesses have received the attention of investors seeking equity-like returns because their products can sell at a premium price. Greenmont Capital is an example of a private equity fund that invests in sustainable consumer products. Some of their investments include Madhava Honey and Mary's Gone Crackers. These companies also need working capital and growth capital as well. RSF Social Finance has provided senior, secured debt and mezzanine debt to Guayaki, Happy Baby, Late July and others.

Technology and web-based platforms

Recently, there has been burgeoning funder interest in technology-focused or web-based businesses working to increase the efficiency of regional food supply chains. Most of these businesses are early stage and are trying to fill the existing gap in technology specifically designed for small and mid-sized farmers. While large, global supply chains have a wealth of technology available to them, there is a need for solutions tailored to the scale and unique needs of shorter, regional supply chains and producers.

A small number of new businesses have begun to address these needs and are attracting capital, including venture capital funding. Technology and web-based businesses inhabit arenas that venture capitalists are familiar with (unlike many other aspects of agricultural systems), and offer the potential to scale at a quick pace. Farmigo is an example of a technology company that is enabling farmers to run their CSA programs more efficiently by providing operational guidance on loading their trucks and delivery routes in addition to acting as an intermediary to attract new CSA customers. Farmigo has received venture funding from firms such as Benchmark Capital.

Gaps in Funding

While capital is flowing to processing, aggregation, and distribution, some major gaps still exist including:

Meat and poultry slaughter and processing

With the increasing demand for local food has come a rising demand for locally, sustainably-raised meat as an alternative to meat products from factory farms. Because of the intense consolidation and concentration of the beef, pork, and poultry industries since the 1980s, many of the small or mid-scale slaughter, processing, and packing facilities have disappeared from numerous regions around the country. One statistic that illustrates the geographic concentration and consolidation of the meat processing infrastructure in the U.S. is that over 60% of the cattle slaughtered in 2009 took place in just three states: Kansas, Nebraska, and Texas. (NASS, 2010) Similar concentration has occurred in the pork and poultry industries. As these industries have concentrated in particular regions, smaller scale industry and infrastructure has diminished or altogether disappeared. Indeed, even in regions (like the Midwest) where industry has concentrated, there is little small or mid-scale infrastructure left for those farmers who do not wish to sell their animals into the industrial system.

There is a great need for funding to rebuild meat processing infrastructure, but funding has not been flowing into this area because of the difficulty involved in financing meat slaughter and processing operations. The costs are high, there are large initial investments needed, and there is an immense amount of regulation involved at both the state and Federal levels. (CISA, 2011; Dickie, 2010) A particularly large obstacle is the policy that a USDA inspector must be on-site to inspect each carcass if the meat is intended for interstate commerce. This is a challenge for small facilities that serve multi-state regions yet do not have a large enough capacity for the USDA to assign an inspector to their business full-time. Unfortunately, businesses cannot be up and running without the required inspection, but funders are hesitant to invest in these businesses before the inspection process is securely in place and the facility is assured it will be able to run. Lastly, the issue of seasonality plays a role in the potential success of meat processing operations. Producers raising animals on a small or medium scale are likely to be raising them on a seasonal cycle, which presents a problem when all producers in an area want to bring their animals to slaughter at the same time of year. The other side of this problem for the slaughter facility is that there are periods during the year when there is little demand for their services. (VSJF, 2011)

Fruit and vegetable processing and storage

Light processing of fruits and vegetables such as washing, grading, chopping, peeling, packaging, or freezing is needed to make produce more convenient to use and cook for institutions, wholesalers, and retailers in regional supply chains. Additionally, more storage facilities are needed both on and off farms to extend the availability of food products beyond their normal season. This kind of infrastructure can expand market opportunities for producers to sell larger volumes, or to sell "seconds" (i.e. any kind of produce that does not meet the standards for being sold raw to consumers – blemished, misshapen, or too large/small). (CISA, 2011) In areas that cannot grow much food during the winter, there is a particular need for frozen products, storage crops, and value-added processed products (for example, processing in-season fruit into preserves, or tomatoes into sauce). For consumers and institutional purchasers, availability of this processing and storage means regionally produced food can be available year-round or, at least, can expand the seasonal availability of certain products.

Logistics, brokering, and transportation

As important as it is to build demand for regional/local food amongst wholesale buyers, so is the transportation of that food. Bottlenecks occur in moving product from the farm to the buyer if logistics and transportation services are not available. Moving product around a region (especially from the more rural areas to urban population centers) requires thoughtful planning and coordination. Large initial investments are required for trucking businesses, margins are low, and the models are still being tested in regions around the country. While there is a large gap in this area of logistics and transportation, some organizations and businesses (including those called food hubs) are starting to address these issues. Red Tomato is an example of one hybrid non-profit/business that is providing logistics and coordination for regional supply chains. Red Tomato does not own trucks or warehouses, but works to connect regional farmers in the Northeast to regional wholesale markets that the farmers could not conveniently access on their own. Once a purchase happens, Red Tomato coordinates the movement of product from the farm to the wholesaler through relationships with other trucking, distribution, and aggregation companies (many of whom are part of the existing, conventional supply chain) in the Northeast.

Bridging the Gaps

Processing, aggregation and distribution activities are the necessary pieces of regional food systems that enable the full supply chain. Unfortunately, slaughter is under-funded due to large up-front fixed costs and barriers to receiving USDA approval and seasonality make slaughter a difficult investment opportunity. Funding that has been allocated to slaughter has mainly been in the form of grants with the hope that by creating these facilities, investments in production and retail can flourish.

In addition, little funding is going towards fruit and vegetable processing, storage and logistics, and brokering and transportation because there are very slim margins, high fixed costs, and low returns. Similar to production, patient capital with flexible returns and a long-term time horizon in addition to grant funding is needed to support this section of the supply chain.

Retail and Access

The USDA's Economic Research Service (ERS) estimates that total food expenditures for all food consumed in the United States were $1.24 trillion in 2010. Food purchased for home consumption (through retail channels) accounted for 52% of that total. (USDA-ERS, 2012) This makes clear the enormous market opportunities available in the retail sector if regional food systems can be appropriately scaled up to meet the needs of wholesale markets. Importantly, it is also in the mainstream retail sector where the greatest opportunities lie for addressing issues of food access by low-income consumers.

There are several major drivers of where funding is being directed at the retail and consumer level of the supply chain: increasing concern over the obesity epidemic, diminishing food security in the U.S., and the market potential of the retail sector for regionally, sustainably produced foods. Thus, funders and service providers working on consumer-level issues in regional food systems are focused both on creating access to larger markets for regional food producers, and ensuring access to healthy, fresh food for consumers, particularly those in underserved communities. Also being addressed is the intersection of these two issues, and how to make healthy and regional/local food more affordable for low-income people.

Ensuring that underserved communities have access to healthy, fresh food is critically important because these residents tend to have higher rates of obesity, diabetes, heart disease, cancer and other chronic. In particular, the obesity epidemic is most severe for low-income minority groups. Nearly a fifth of all African-American children and nearly a quarter of Mexican-American children are obese, compared with one-tenth of Caucasian children. Furthermore, children from low-income families are twice as likely to be overweight as those from higher income families. (Ogden and Carroll, 2010) Studies of these at-risk populations have shown that improving community environments, health and nutrition awareness, and affordability of food positively affect eating habits and improve health.

Improving access to healthy food through retail can also bring economic benefits to a low-income community. Grocery stores create jobs and generate tax revenue. Furthermore, when connections can be made between agricultural communities and markets in population centers, including low-income urban areas, there is also economic benefit for rural communities. A Michigan study found that tripling the amount of fresh produce that farmers sell directly to consumers at farmers' markets could generate as many as 1,889 new jobs and $187 million in personal income. (Cantrell et al, 2006)

Beyond physical access, the issue of affordability of fresh, nutritious food is another challenge. Research on overall diet costs has shown that eating healthfully is not necessarily more costly. (Golan et al, 2008) The issue of affordability, though, has become particularly important in sustainable, regional food systems due to the challenge of ensuring that producers receive fair prices, while also making sure food is still affordable and accessible to all consumers. This has led to many programs and efforts to subsidize the cost of regional/local food for low-income consumers through farmers' markets, CSAs, and other direct outlets.

Increasing consolidation and competition in the U.S. retail industry creates major challenges for small and mid-sized producers, and requires innovative strategies for helping them to meet the market's demands. In 2009, sales by the 20 largest food retailers totaled $404.2 billion, amounting to 64% of all U.S. grocery store sales, an increase from 39% in 1992. (USDA-ERS, 2010) These big retailers demand volume, consistency, extended availability, and low prices achieved through economies of scale that small and mid-sized producers cannot always provide. One sign of the increasing demand for local food has been exhibited by the announcement of local food initiatives by leading retailers like Walmart, Safeway, and Publix. (USDA-ERS, 2010) These large retail businesses are committing to source more food from within a closer range of their individual stores, but it remains to be seen how the retail giants will manage to give farmers fair prices, and how they will address some of the infrastructural gaps pertaining to processing, aggregation and distribution. Thus far, it appears that small, independent grocery retailers, whose identity and store assortment practices have closer links to specific geographic locations, are better positioned to incorporate local food into their offerings and as part of their corporate identity. (Packaged Facts, 2007)

Building up demand for healthy, fresh, regional food at the retail level, and matching it with increased supply and infrastructure (as discussed in the previous two sections), has the potential to change the way America eats.

Where Funding is Going

Much of the work to increase access to healthy food is being done by non-profit organizations through grant funding, public funding, or public-private partnerships. While much funding and attention is being directed to issues of access at the retail level, the problems are vast, and philanthropic and government support will continue to be a need for the foreseeable future.

Supporting low-income consumer access to healthy food through expansion of retail businesses

Recently, there has been much support for projects increasing access to affordable healthy foods in communities that lack these options. Some projects focus on increasing the affordability and accessibility of sustainable, regional food, while others are focused solely on nutritious food, regardless of where it comes from. It is believed that by expanding the retailing of healthy food in underserved communities, people will have fresher, nutritious food options and will want to buy it. Policymakers and advocates of this strategy of retail expansion, including the Obama Administration, see it as an important way to combat the obesity epidemic in low-income communities, and to address issues of food justice, food access, and equity in the food system. Recent studies have raised questions about the effectiveness of simply expanding retail options to address the obesity epidemic. (An and Sturm, 2012; Lee, 2012) However, many researchers and advocates say that further investigation is still necessary due to the complexity of the issue, including the challenge of accurately assessing access, and the impact of other factors such as structural poverty and racism.

A number of retail expansion projects are being successfully implemented across the country. The largest of these is the Healthy Food Financing Initiative (HFFI), a joint program between the White House, the U.S. Treasury, the Department of Health and Human Services, and the USDA. Through the initiative, $400 million is to be granted to organizations with strategies for addressing healthy food needs at the retail level in underserved communities. The organizations that are beginning to receive this grant funding are charged with deploying these funds mostly as low-interest loans to traditional or alterative retail businesses that sell healthy foods in urban and rural underserved areas across the country. Some recipients of funding have been Coastal Enterprises, Inc., NCB Capital Impact, and The Reinvestment Fund. The projects being funded by these groups include both building new healthy food retail establishments and making it possible for existing retail outlets to carry more healthy foods, especially fruits and vegetables.

Another initiative investing in retail expansion is the California FreshWorks Fund. This is a public-private partnership loan fund that has raised $264 million to invest in bringing grocery stores and other healthy food retailers to underserved communities throughout California. Financing has gone to projects that will build new retail establishments and to existing retailers to expand their capacity to offer healthy food products. Healthy corner store initiatives, such as those of The Food Trust (in Philadelphia) and DC Central Kitchen (in Washington, D.C.) are examples of efforts to expand the availability of healthy food without building new grocery stores. Similar initiatives are happening in many cities, as well as in some rural areas.

In addition to the more traditional models, other innovative healthy food retail venues are being explored and are attracting support from funders. Stockbox Grocers in Seattle is a start-up business that converts reclaimed shipping containers into miniature grocery stores and operates them out of parking lots in underserved communities. Stockbox is currently fundraising through Kickstarter to expand their stores.

Supporting low-income consumer access to healthy food and local/regional food through subsidizing the cost

Beyond the focus on making healthy food available in underserved communities, there is a significant amount of support going toward making healthy foods, particularly locally produced foods, more affordable and appealing to low-income households. Non-profits, farmers' markets, USDA, and private foundations are working together across the U.S. on innovative strategies to facilitate the use of nutrition assistance money, to provide incentives, and to subsidize the purchase of healthy food.

A key strategy for facilitating the use of nutrition assistance money is focused on expanding the capacity of fresh food retailers to accept Federal nutrition assistance benefits like the Supplemental Nutrition Assistance Program (SNAP); Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and Senior Farmers' Market Nutrition Program through Electronic Benefit Transfer (EBT) machines and other technologies that facilitate payment. For example, non-profits and farmers' markets have been working with the USDA Agricultural Marketing Service's Farmers' Market Promotion Program to grow the number of farmers' markets and farm stands authorized to accept EBT, and to use USDA grant dollars for the installation of EBT machines. As a result of this work, the number of farmers' markets and farmstands accepting EBT increased by 51 % to over 2,400 between 2010 and 2011. (USDA - KYF2, 2012)

Sliding scale community-supported agriculture (CSA) programs, with portions of low-income shares sponsored by members who can afford to pay more, are another strategy being used to subsidize the cost of healthy foods. Some CSAs also have sponsored shares available for free. A number of other successful programs in several regions combine a subsidy and an incentive to purchase healthy food by providing double value coupons that match the amount of SNAP dollars a low-income consumer spends on produce. In these programs, the funding used to match SNAP purchases comes from philanthropic and non-profit grant dollars supporting organizations such as Wholesome Wave, a national non-profit leader in expanding access and affordability of locally-grown fruits and vegetables. Wholesome Wave uses grants to fund its Double Value Coupon Program (matching SNAP spending) and its Fruit and Vegetable Prescription Program (in which healthcare providers write "prescriptions" for the purchase of fresh fruits and vegetables at local farmers' markets). Other similar double value programs include Fair Food's Double Dollars (in Philadelphia), Fair Food Network's Double-Up Food Bucks (in Michigan), and Roots of Change's California Farmers' Market Consortium (CFMC).

Non-profit and for-profit urban agriculture and community gardening initiatives in low-income areas

Community gardening education and urban agriculture initiatives that teach people in underserved areas how to grow their own food (usually on a micro-scale) can be important vehicles for engaging people with what they eat. These programs raise awareness about healthy diets, cooking fresh vegetables, and generally seeking out healthy, fresh food. Capital for community gardening and urban agriculture projects is generally in the form of grants from community-level non-profits, local governments, and community foundations that are concerned with social and health issues in low-income areas. These projects, which are often relatively small, are attractive to funders because they are concrete, tangible, community-building activities that do not require enormous amounts of capital in order to have an impact on the community.

The Fair Food Network's "Fair Food Detroit" program is an example of a comprehensive community food project that uses urban agriculture and healthy food education to encourage residents to purchase healthier foods and to engage in food justice and access efforts around the city. In Oakland, CA, Movement Generation's Justice and Ecology Project focuses on growing food in an urban environment as a basis for community resilience. There are many similar small grassroots efforts happening in urban and rural communities across the country that, like the Fair Food Network and Movement Generation, are supported through grants.

Gaps in Funding

Private investment for community-focused, healthy food retail ventures in underserved areas

Despite the fact that food access at the retail level is receiving a great deal of attention and support, a gap in capital remains in private investment for community-focused, healthy food retail ventures in underserved areas. A small number of social entrepreneurs across the country are designing retail ventures that have holistic strategies that address issues of healthy food access, education and awareness, and community economic development in underserved communities. These enterprises are not traditional retail ventures, but instead place a strong emphasis on creating community through their businesses and incorporate meeting community needs in their mission to provide healthy food options. Some of these entrepreneurs have been successful in getting capital from major public-private partnership programs like California Fresh Works Fund and HFFI, through grants from foundations, or occasionally, through local individuals that invest or donate funds. However, this funding has not been sufficient to fulfill the capital needs of those doing this work.

A group of entrepreneurs in Oakland, CA are trying to start one such venture, People's Community Market, and have faced challenges in attracting the private investment that they need. While the California Fresh Works Fund has given them some funding, they are seeking private investments for the remaining financing. However, they have not been successful despite strong business backgrounds on their leadership team, a thorough business plan, and experience working in the community on food access issues for over a decade.

Bridging the Gaps

Funders identify numerous factors that deter investment in these retail businesses. Major issues include the fact that they involve huge start-up and operating costs, lengthy and complex development processes, challenges in finding appropriate sites, a great deal of risk, slim margins from business activities, and concerns around sufficient demand and nearby competition. Education on the benefits of community-focused, healthy retail operations in addition to patient capital, as described previously, is needed for these ventures to be available and successful.

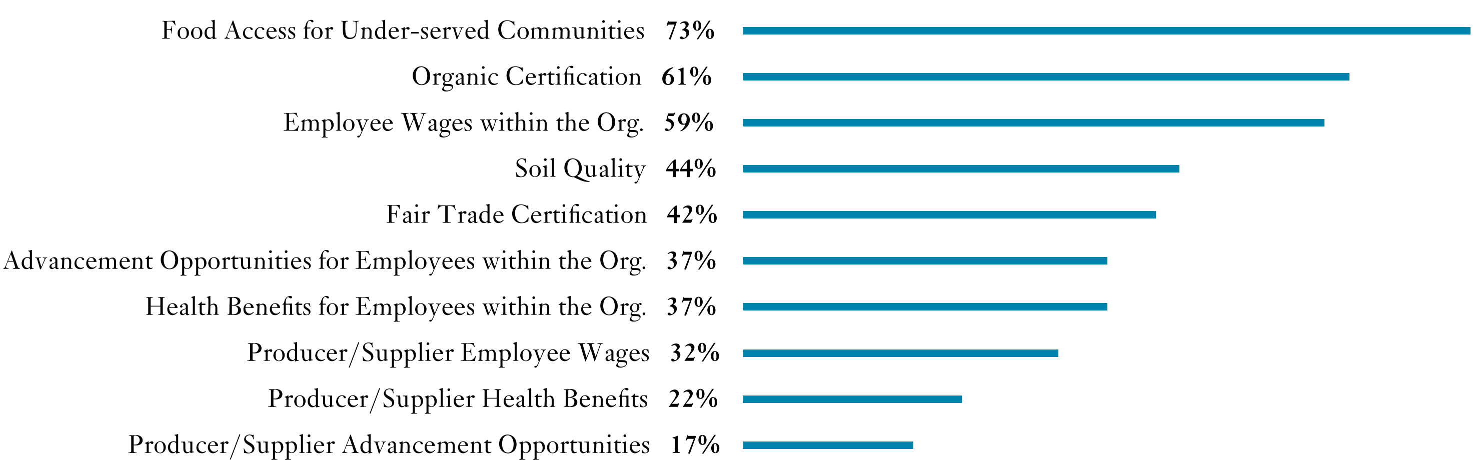
SOCIAL EQUITY AS IT RELATES TO INVESTING ACROSS THE SUPPLY CHAIN

Underlying all aspects of the supply chain are social equity issues. In production, farmworkers are underpaid, over-worked, denied healthcare and sick days and are given almost no opportunities for career progression. In processing, aggregation and distribution, workers are at high risk for injury. Additionally, there is a dearth of retail outlets in low-income areas with vulnerable populations, making it difficult for those residents to access fresh foods.

Much of the funding outlined in this report, thus far, is flowing towards rebuilding healthy regional and local food systems that are designed to be just and fair. Within that work, most organizations and businesses are addressing the issues of food justice and social equity through the lens of funding to improve food access and food security.

More specifically, when asked what strategies investors were using to address issues of social justice/equity, 64% of interviewees responded that they were only focused on access at the retail level. Since access is at one end of the supply chain, further research looked at other impact issues that were being addressed across all areas. According to survey respondents, access for underserved communities remained the impact area with the greatest amount of interest (73%). Interestingly, evaluation of impact further down the supply chain such as the farms in which product is being sourced, was much lower, with an average of 20 % of respondents considering benefits and advancement opportunities as it relates to suppliers (See Exhibit 2). Unfortunately, this only addresses a small, but important, part of the supply chain.

EXHIBIT 2: WHEN EVALUATING A SUSTAINABLE FOOD & AGRICULTURE INVESTMENT, DO YOU LOOK AT ANY OF THE FOLLOWING?



Labor is a social equity issue that cuts across the entire food system supply chain, yet the amount of capital flowing directly to food system worker issues is extremely small. This is true both for labor within the mainstream and sustainable food systems. The small amount of capital that is flowing to support change around food system worker justice and equity is aimed mostly at farm workers, while labor in other parts of the supply chain – such as food service or processing – receives less attention. Notably, funding and support to tackle labor issues generally does not come from funders focused on food system sustainability. Instead, those focusing on funding this cross-cutting issue are often working under the auspices of human rights, social equity, or workplace health issues.

In general, the few funders working on food system labor issues are primarily using grant funding and are focused on addressing the many problems plaguing the mainstream system (rather than the new and alternative systems). This is likely because many organizations and businesses working to strengthen sustainable, regional and local food systems are trying to address the dominant system's problems by creating new business models or approaches that include justice and equity for workers from the ground up. Instead of directly fighting industrial abuses, there is an assumption that regionally or locally focused supply chain businesses and farms have values embedded in them that prioritize fair treatment, clean and safe housing, health care, and livable wages for workers across the supply chain. While this may be true in many cases, it must not be assumed, especially as local and regional food systems scale up and expand. Further, it is likely that farmers working as the sole proprietors on small farms do not or cannot adequately compensate themselves from the proceeds of just farming activities.

Although a small number of organizations are paying attention to these issues, a major gap in capital to affect change around labor issues remains, and there is a need for investments that ensure social justice and equity for workers in local, regional, and mainstream food systems. Some specific labor-related gaps and funding needs faced by the sustainable and mainstream food systems are as follows:

Farm and food system worker rights: As mentioned above, it is important as regional food systems scale up and expand that worker rights are embedded as a priority. For example, many mid-sized fruit and vegetable farms are labor-intensive and hire migrant farm workers. Although many of these farms provide clean housing, fair wages, and health insurance to their workers, it is important to ensure that all farms are committed to fair worker treatment.

Farm and food system worker assistance: Public support and grant funding is needed for organizations and programs that provide services to address immediate abuse, health violations, and safety issues faced by farm and food system workers.

Grassroots labor organizing: Grant funding is needed to support grassroots labor organizing across the food system in order to empower the affected populations to take leadership and create movements fighting for their rights.

Legal compliance issues: Funding is needed to develop new models of on-farm training, education, and ownership models. Many small and mid-size farms depend on interns who are there to learn farming and to work as part of the production cycle. Full compliance with employee tax, benefits, and minimum wage obligations is nearly unsupportable from farm income, but the learning and labor are needed.

These areas and issues are difficult to address through investments and are therefore mainly being addressed with grant capital. That said, it is important that investors are aware of the social equity issues, especially fair treatment of workers across the supply chain, so that they can include and value them in their impact assessments and due diligence.

OPPORTUNITIES TO INCREASE THE FLOW OF CAPITAL

In evaluating each point on the supply chain, there were clear reasons for the existing gaps. These high level barriers include:

Social Equity is Equated to Access for Most Funders. When polled about social equity as it pertains to the food system, most funders are focused on food access for under-served communities rather than issues across the supply chain including fair wages and healthcare for laborers. Education and awareness on issues across the supply chain is needed in order for reform through investing to occur.

Investors' Risk Appetite does not Align with the Funding Opportunities. In order to increase the flow of capital, entrepreneurs need support in creating more stable and mature businesses to attract investor capital through technical assistance. In addition, investors need education to understand the unique characteristics of food and agriculture operations (e.g. high up-front costs, seasonality, slim margins) to layer capital and alternative funding vehicles to meet the risk, return and liquidity profiles of these enterprises.

Sustainable Food Systems are Inherently Regional. Currently, the U.S. food system is highly efficient and consolidated. To create a more just and sustainable food system, this should be replaced by a regionally-based system supported by small and mid-sized farms and businesses across the supply chain.

Through analysis, two specific approaches to overcoming these barriers and to increasing the deployment and effectiveness of capital have been developed.

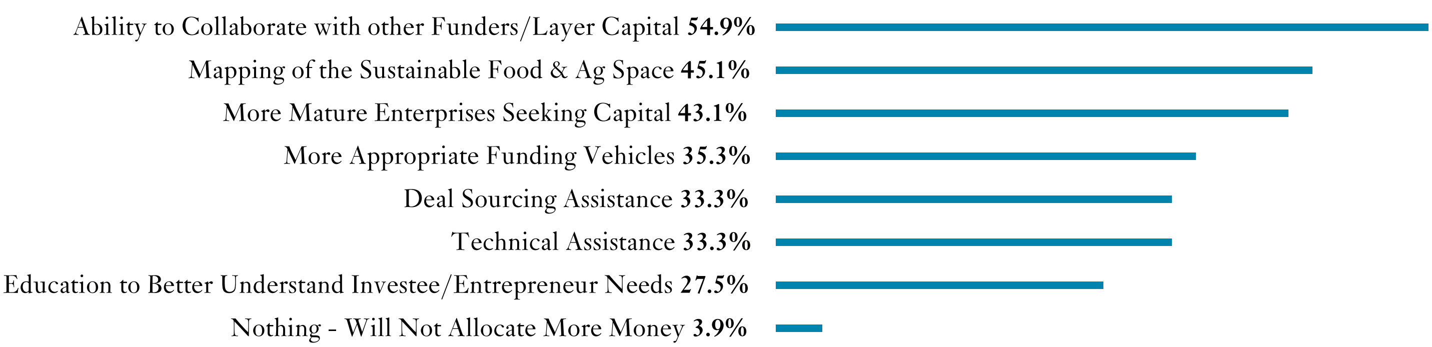
Building a Foundation	Strategic Capital
technical assistance	*syndication*
collaboration and coordination	*community-based investing*
education and awareness	*alternative financing vehicles*

These approaches can be used by funders to successfully address the identified gaps in capital throughout the three major segments of the supply chain: production; processing, aggregation and distribution; and retail. By first building a foundation to support capital flow, investors will have the basis from which to strategically deploy the appropriate types of resources.

BUILDING A FOUNDATION

In order for capital to flow to all aspects of the food system, there needs to be a foundation created that provides greater knowledge, collaboration and shared learning. When asked what is needed to increase their funding to the food and agriculture sector, survey respondents overwhelmingly highlighted foundational elements with collaboration and mapping receiving the most attention (See Exhibit 3).

EXHIBIT 3: WHAT DO YOU SEE AS NEEDED IN ORDER TO INCREASE YOUR LEVEL OF INVESTING IN SUSTAINABLE FOOD & AGRICULTURE?



A strong foundation of technical assistance, education and collaboration will help entrepreneurs to become investment-ready and to grow their businesses to more mature levels. It will also ensure that funders are able to understand unique aspects of regional, sustainable food systems and are able to coordinate to provide appropriate financing.   Similar to the efforts taken to scale in other impact investing sectors such as microfinance, detailed in Monitor Group's paper titled *From Blueprint to Scale*, grant capital is needed to build this base. Some specific areas for creating this foundation within the food and agriculture sector include:

Technical assistance

An important part of solidifying the foundation for a healthy, sustainable food system is making available farm and food business technical assistance (TA). Forty-three percent of investors noted that in order to increase their funding, they would want to see more mature organizations doing this important work (See Exhibit 3). Increasing the business planning, development, and management skills of farm and food entrepreneurs through technical assistance will advance the maturity of the organizations and will give investors more confidence in this sector's viability. Resources (primarily philanthropic) are needed to fund farm- and food-specific technical assistance programs, and organizations are needed to provide these services.

Currently, funders (particularly community loan funds and CDFIs) are providing some sector-specific technical assistance (TA) to potential borrowers to help them become investment-ready, in part because this opens up the small pool of viable enterprises that these lenders can fund. It also enables existing or early-stage businesses to determine how best to grow or increase their impact, or how to sustain their businesses successfully in the long-term.

Another possible solution is to create more partnerships between existing technical assistance providers and funding entities, and potentially tie entrepreneur funding to ongoing TA. Some Slow Money chapters have had great success connecting entrepreneurs with experienced, volunteer business professionals who serve as mentors both before and after funding is received.

Non-profits working with small or mid-sized farms and food businesses can play a role in guiding them through the process of growing their enterprises. Food hubs, given their direct relationships with producers, have been acting as an important resource for farmers on what they can do to scale up, but they are limited in their ability to provide TA. While food hubs have a vested interest in helping farmers scale up, they may not have the tools or resources to assist them. TA has been slightly more feasible for those hubs that function as non-profits and receive grant funding or have earned income that off-sets the costs of conducting programmatic work.

Currently there are limited options for entrepreneurs as TA providers tend not to have specific expertise in this sector. While the Small Business Administration and other similar organizations can provide business planning advice, they do not have knowledge as it pertains to regional food and agriculture. In order for TA to be available and effective, there needs to be an increase in TA providers who are proficient in the particular characteristics of the sustainable food and agriculture sector. Grant funding will be necessary to deliver this technical assistance to entrepreneurs.

Coordination and Collaboration

Coordination among food system stakeholders is critical in order to efficiently and effectively drive capital toward developing sustainable food systems. Currently, individuals, businesses, non-profits, governments, foundations, and networks are all working on many of the same goals, often with little information sharing. Increased sharing of best practices, strategic planning, resources, enterprises being funded, and expertise would help regions achieve a better understanding of what work is being done in their food system, and create opportunities for collaboration and mentorship.

When funders were surveyed and asked what would be needed in order to increase their level of investing in sustainable food and agriculture, the ability to collaborate with other funders and to layer capital received the most interest with approximately 55% of respondents noting this as a need. The next need highlighted by approximately 45 % of respondents, was a map of the sustainable food and agriculture sector (See Exhibit 3).

There are a number of examples of coordination among food system stakeholders that demonstrate how some of these needs are being addressed including:

- The Regional Food Systems Working Group (RFSWG) in Iowa is an umbrella network for Iowans working in local and regional food systems. A recent study of the impacts the network has had over the eight years since it was formed found that it has brought new funding opportunities to local groups across the state and helped to leverage capital. This was done by increasing local and state credibility for local food systems work, facilitating partnerships and building trust between groups unlikely to collaborate otherwise, and by building organizational efficiency and capacity of participating groups, which made them more attractive candidates for funding.

- Funders' events such as the Good Food Financing Conference, Sustainable Agriculture and Food System Funders Conference and the Slow Money National Conference have been critical to helping funders understand the national and regional sustainable food system landscapes, including their needs, stakeholders, markets, and the nature of funding opportunities. These conferences also bring farm and food businesses together with potential funders and investors.

While these examples have been effective, there remains a need for scaling up and replicating their efforts. Additional strategies for coordination beyond the aforementioned include:

- Convening regions or neighboring states to discuss regional food system development and financing strategies would facilitate sharing of experiences and help regions or states identify what is working and what is not with regard to deploying capital into food systems.
- Mapping of where capital is flowing across the supply chain so that funders can collaborate and entrepreneurs can better understand where to find appropriate, aligned capital for their enterprises.
- Collaborative grantmaking to address worker rights and to further enable grassroots organizing. The issues around labor are immense and funding is needed in order to have a strong enough voice to change policy and be heard by the large organizations responsible for the abuses.
- Collaborating with investors, including labor unions, to use shareholder activism to improve current environmental and labor practices across the supply chain.

Much of this type of coordination was seen as a need for the entire impact investing space and has been facilitated through the creation of groups like the GIIN, Toniic, ANDE and others. Creating similar organizations focused on coordination that are specific to the food and agriculture sector would greatly increase the flow of capital and draw greater attention to the social equity issues at play.

Education and Awareness

An important building block that would help capital flow to farm and food businesses in need is to develop a better understanding, for entrepreneurs and funders, of which financial solutions and mechanisms can work in this field. More general financial literacy education is needed for entrepreneurs and farmers in addition to what capital and financing mechanisms might be able to fit their unique needs. Not all financing solutions are a good fit for food and farm businesses, if entrepreneurs understood the options, they could seek out the right kinds of capital. Additionally, a better foundation of financial knowledge and understanding about how to start and grow a business, how and why to take on debt or equity, and the risks and potential returns involved would all assist entrepreneurs in running their businesses. This kind of financial literacy could potentially be provided by those identified as technical assistance providers for other business planning and management needs.

Also important is educating funders on the issues unique to food and farm businesses so they understand the level of risk involved, have realistic expectations about returns, and are well positioned to determine and design the most appropriate financial or funding solutions. Particulars like seasonality and weather dependency, and balancing fair prices and wages with tight margins are often difficult to reconcile with traditional market-based funding options, making funders hesitant to invest. These issues come up particularly in regard to innovative businesses in regional food supply chains (processing, aggregation, distribution), which are less understood by traditional lenders and often have unconventional needs. Additionally, sustainable food system businesses have different goals around growth and scale (sometimes they do not want either), and funders need an understanding of how these influence financing.

As mentioned earlier, education around the social equity issues across the food and agriculture supply chain would also benefit funders. This education would create greater knowledge of the issues and risks, and enable funders to look beyond just food access through their social equity lenses. Furthermore, when funders begin to ask the important questions around job quality across the supply chain, entrepreneurs tend to take these issues into greater consideration when looking at suppliers, distributors, and other partners.

There are several ways that funders can increase their knowledge about farm and food businesses. One option is to develop internal capacity through hiring people with expertise in food and agriculture. Another solution is for funders to form partnerships (informal or formal) with organizations working in the field. As mentioned in the "Coordination" section, it is also important for funders to communicate and collaborate with other lenders or investors to strategize, share resources and experiences, and collectively increase their knowledge base.

One example of an existing network that provides a space for this kind of communication is the Sustainable Agriculture and Food Systems Funders (SAFSF), an international network of grantmakers. The opportunities that come with networking, as well as the partnerships and capacity development mentioned above, can help more funders understand this complex field, and help them become more comfortable providing financing for it. At their most recent conference, SAFSF focused heavily on social justice issues, by educating funders through speaker events and site visits to organizations that are both providing adequate benefits to farm workers and those that are not.

In addition to networks like SAFSF, more intermediaries focused on the sector would allow for funders to invest in a co-mingled fund specifically for food and agriculture in order to gain shared experience, and to better understand how direct investing might serve their needs and the resources it would take to do it well. For example, several foundations have invested with RSF in an effort to learn about the investment process, to potentially participate on loans, and to build the skills and processes for making their own direct debt investments to sustainable food and agriculture businesses.

Building Foundations in Under-supported Regions and Communities

As mentioned, while in some regions there has been much activity and progress around the development of sustainable food systems, in other areas this work is nominal to nonexistent. Often these are areas of the country where there has been historic disinvestment, poverty, and structural racism. In these regions, there is a notable absence of businesses, food and agriculture organizations, community groups, and other important foundations necessary for the investment of capital in any form.

A strategic focus on under-supported regions and communities is essential to achieving social justice and equity in our nation's food systems. It will address the critical need for extensive start-up work, such as convening stakeholders, raising awareness, addressing underlying social issues, building capacity, supporting organizational development, planning, and researching feasibility studies, market studies, and pilots—all requiring significant grant funding. Once the foundations required for food system development are put in place, investments of capital can be made in building up the food system supply chain and supporting market-based approaches to regional food system development.

Examples of organizations that have made the strategic decision to focus on under-supported regions across the country do exist. In South Dakota, Lakota Funds is a CDFI focused specifically on building the foundations for economic development at the Pine Ridge Reservation. The organization provides education and capacity building, technical assistance, and financing for agriculture and food-related projects and businesses. Rural Support Partners is a social enterprise with a strategic focus on under-supported parts of the rural Southeast, including Appalachia and the Mississippi Delta. The venture is focused on scaling sustainable economic development efforts, many of which are related to food and agriculture. They do this by working to strengthen and support leaders, organizations, and networks, as well as participatory research and evaluation projects.

Other organizations have also recognized a more specific need to promote social entrepreneurs from under-supported areas, particularly entrepreneurs of color. Many of these entrepreneurs lack access to the necessary networks and financial resources, putting them at a disadvantage. Despite the progress being made by these organizations, this is another example in which there remains a widespread need for more support.

Strategic Capital Solutions

Once a foundation is built, investors still need to alter their investment strategies in order to support the development of sustainable food systems and to recognize the diverse needs of businesses and organizations working throughout the supply chain, as well as the many challenges that are unique to the work of rebuilding food systems. A strategic approach to the investment of capital will successfully address some of the current funding gaps and overcome barriers mentioned earlier.

Syndication

Many of the investment opportunities come with a need for diverse types of capital to address the risks inherent in the food system. Syndication among funders allows investors with different risk profiles and appetites to layer their capital to increase the funding going to these social enterprises. Of those interviewed, when asked where money is flowing, over 57% noted examples that included the layering of capital.

An example of this type of syndication can be seen in a loan fund created to provide capital for food system infrastructure. Housed within a community organization, the loan fund is capitalized by a program related investment (PRI) from a local foundation and funds from a local CDFI. Several partner organizations are involved in running the fund, including another CDFI, a CDC, and a non-profit. The group of partner organizations acts as an investment or loan committee and decides which deals to pursue while the CDFI investor conducts all the due diligence. The loan fund connects businesses to technical assistance and business management resources. Additionally, because they are focused on lending within their region, relationships and trust have played a large role in their investment decisions. "Everybody knows somebody in this kind of model," said one of the partners. On the flip side, he noted that in a local economy, everyone is also dependent on someone else in the region, so the success of the businesses requires that the whole system remain financially healthy and stable.

Programs such as The Healthy Food Financing Initiative and the The California Freshworks Fund were established through syndication. The California Freshworks Fund was initially seeded by the California Endowment with a $30 million investment and a $3 million grant. Subsequently, additional investors and philanthropic institutions have come in with layered financing to fully capitalize the fund at $264 million.

Syndication on investments is a natural occurrence when there is a platform for coordination. By understanding the risk profile of each investor, deals can be created that allow for layered capital, enabling grants, PRIs, debt and equity to work together to grow businesses. This layering of capital can also address different return expectations and liquidity needs, enabling the funding of businesses with slim margins and large up-front costs.

Community-Based Investing

Community based investing methods create opportunities for local, unaccredited investors to align their money with their values and invest in their local/regional food system. The flexibility and personal approach of these methods also enables them to fill important gaps in capital, such as those around micro and working capital, and also make it possible for them to be part of layered capital solutions. Community based investing methods include: investment clubs, small loan funds, and less formal web-based crowdfunding platforms such as Kickstarter, Kiva, Indiegogo and Profunder. Increasing interest in community-based investing, has spurred organizations around the country to begin to explore their options for more community-oriented investing and financing, but the movement is new and the need is still great.

The grassroots Slow Money movement has championed this idea of providing local individuals with opportunities to invest in their community or region's businesses and some groups are even receiving inquiries from beyond their member base. Each Slow Money chapter is experimenting with different structures: some have pooled funds and created investment clubs, some connect entrepreneurs directly with individual investors through entrepreneur showcases, and others are building relationships and forming partnerships with banks and loan funds.

Outside of Slow Money, small, local loan funds are exploring similar community-based investment opportunities. One such loan fund started by the La Montañita Cooperative in New Mexico is open to coop members. Members can invest between $250 and $10,000 to support small loans to the farmers, ranchers, and local food producers who sell to the cooperative. Thus far, the fund has raised $107,000 and loaned $35,000, with a return of 2.1% for investors.

Web-based community-investing platforms allow projects in need of capital to raise money from family, friends, community members, and strangers over the web. Currently, the fundraising mechanisms are contribution based (neither debt nor equity). However, with the recent passing of the crowdfunding bill, there is a tremendous opportunity for entrepreneurs to raise start-up capital from their local community via online web platforms and for increased micro-lending across the supply chain and specifically to farmers.

Alternative Financing Vehicles

In order to build a food system that is more just and sustainable, funders need to look outside of traditional investments to financing vehicles that address social equity and the unique aspects of food and agriculture businesses (slim margins, seasonality, climate risk). Funding opportunities that could bridge the funding gaps and support the needs of the food sector include:

Guarantees

Guarantees are a great way for funders, especially those most comfortable with grants, to support the flow of capital. Guarantees are an assurance that a debt will be paid if the borrower fails to do so.

There is a need for riskier, subordinated debt across the supply chain to support fixed asset purchases, working capital and other needs to grow food and agriculture businesses, as noted by 65% of entrepreneurs. Guarantees decrease the risk of this type of lending and provide credit enhancements, and thus enable more risk adverse organizations to fill the gap.

Making guarantees accessible as credit enhancements to encourage funding is a simple yet highly effective way of making additional capital available. By simply providing a guarantee, an investor offers to cover all or a percent of losses should they occur. This simple pledge can leverage significant follow-on capital, lowering the risk profile of an investment. Guarantees can be made by individuals and foundations and can even qualify as Program Related Investments.

Social Impact Bonds

The emergence of the Social Impact Bond (SIB) has many people excited about the opportunity to tie social outcomes directly to investment dollars. SIBs are investments in which investors pay upfront for social services; when these services reach desired outcomes the investors are paid back through savings.

There is an opportunity for SIBs to positively affect food and agriculture as people who have healthier diets (less pesticides, fresh fruits and vegetables) will be less likely to get sick. This would directly translate into cost savings for insurance companies and, as such, they might be willing to pay for these outcomes, especially those targeted underserved communities that have high rates of obesity.

While the true success of SIBs has yet to be realized, there is an opportunity for this type of investment to support non-profit organizations with an alternative to grants and to create change that is directly connected to the outcome(s), creating true alignment.

Farmland Acquisition

There is a significant funding need to address the land acquisition hurdle for starting farmers and to preserve farmland. One solution is for states and/or Federal governments to acquire land through a bond raise and then lease the right to farm the land to farmers. Alternatively, large foundations could convert a portion of their endowments from equity holdings to land holdings and then make the land available for farming through lease arrangements. The income from the land could make up for some perceived loss of return on investment.
Both of these models would enable beginning farmers to more easily enter the farming business and preserve this important land at the same time. Farmers could then sell the 'right to farm' to other farmers when they retire, enabling them to have some equity in their businesses.

Royalty Financing

Royalty financing is gaining traction in the impact investing field and could be beneficial to the food and agriculture sector as well. In royalty financing, equity is given to an organization but instead of a return of capital at a later sale date, the capital is returned as a percentage of revenues over a fixed period. Royalty financing could be a viable solution for businesses that do not want to scale or sell their businesses to fulfill a liquidity need for investors. Through royalty financing, investors can receive equity-like returns and liquidity with no change of ownership, thus decreasing the likelihood of a dilution of mission.

Additionally, royalty financing would enable the formation of coops since shares need to be held by members. Through royalty financing, the investor can have a non-voting equity position and ensure that ownership stays within the community over the long term. It is important to note that this will not be suitable for all businesses in the sector as many have slim margins such as processing for fruits and vegetables.

Subordinated/Venture Debt with Warrants

Many entrepreneurs across the supply chain have upfront capital expenses and need working capital in order to launch their enterprises; this need is particularly true for production and processing, aggregation and distribution business that have high start-up, fixed costs. Through the use of venture and/or subordinated debt, funders provide debt financing to organizations that may not have positive cash flows and/or enough assets to use as collateral. This is particularly helpful for those businesses with high up-front fixed costs; venture and/or subordinated debt can be structured to provide the financing necessary for equipment and real estate while also allowing for a delayed payment stream.

In order to appropriately compensate investors for the risk associated with this type of debt, entrepreneurs can offer warrants, or the ability to purchase equity at a later date at a set cost. Due to the early stage of these businesses, equity-like returns cannot be provided purely by debt payments. Warrants offer the opportunity for additional returns to address the inherent risk associated with this type of financing, making it more attractive to investors.

Strategic Grantmaking

Grantmaking is necessary to build a foundation for increasing investments in support of a more just, sustainable food system. In addition to the foundational elements described above, grants are necessary to support key businesses and supply chain needs that do not lend themselves to investing. Grantmaking can influence policy changes and support organizations' ability to meet regulatory standards, specifically around USDA and HACCP certification. By providing grant funding to these areas, funders can unlock road blocks and create viable businesses across the supply chain.

For example, in order for mid-sized cattle farmers to survive, they need to be able to access humane, organic slaughter houses that are in close proximity to their farms. Unfortunately, it is difficult to acquire up-front financing for slaughter due to the challenges surrounding USDA certification. By providing grant financing to support the creation of a slaughterhouse, funders would not only be supporting that business but would also be unlocking the supply chain and as such impacting the success of the businesses on either end – the farmers and the distributors.

CONCLUSION

The research conducted for this report highlighted both the successes and the challenges of those working to finance a food system that is fair and just. The problems within our food system are complex and interconnected and therefore require more attention; creative solutions are needed that address the environmental and social issues inherent in the current system.

We highlighted two opportunities to increase the flow of capital to support sustainable food and agriculture as follows:

Strong food system foundations must be laid: Before sustainable food systems can be most strategically and adequately funded, it is crucial that certain building blocks be put in place and strengthened including:

- Technical assistance to increase the business acumen of food system entrepreneurs
- Opportunities for collaboration and coordination among funders and entrepreneurs
- Education around and transparency into the social inequalities across the food system supply chain and how to appropriately finance businesses in the sector

Even with a strong foundation, innovative financing solutions that meet the needs of businesses and that support social and environmental solutions are required to create positive change in the food system. There is no singular funding vehicle that will speak to the unique aspects of food and agriculture businesses as each organization is beholden to its geography and regional supply chain. As such, a variety of funding mechanisms, including grants, from aligned individuals and organizations will be needed to support this work.

Strategic capital placement: Creative capital solutions are needed to meet the diverse needs of the food supply chain including:

- Syndication on investments to address different levels of risk inherent in investing in the sector
- Community-based investing to address regional-specific needs
- Alternative financial vehicles that address and/or are tied to social justice outcomes, seasonality, and that recognize the slim margins that are inherently part of food and agriculture

There remains a need for more capital across the entire supply chain, even in the areas identified as those already receiving funding. A foundation for education, collaboration and technical assistance will allow for coordination across different regions, creating the transparency necessary for shared learning and cooperation, and enabling investors to support entrepreneurs to build a more just and sustainable food system.

INTERVIEW LIST

FOUNDATIONS

Cathy Berry/Sandy River Foundation
Jessie Smith Noyes Foundation
Kellogg Foundation
Kresge Foundation
Merck Fund
New Tamarind Foundation
Solidago Foundation
Springcreek Foundation
Swift Foundation

OTHER FUNDERS

Aperio Group
CEI
Clean Yield Asset Management
Co-op Loan Fund of New England
Cornerstone Ventures
Fair Food Fund
Farmland LP
Franklin County CDC
New Island Capital
No Small Potatoes
Permaculture Credit Union
PV Grows
Shade Fund
Slow Money Maine
Slow Money NorCal
Slow Money Northwest
The Carrot Project
VT Sustainable Jobs Fund

NON-PROFITS/HYBRID ORGANZATIONS

Appalachian Sustainable Development
Cape Cod Fisheries Trust
Common Market
DC Central Kitchen
Eastern Market
EcoTrust (Food Hub)
Fair Food Network
Fair Food Philly
Family Farmed
Grow Food Carolina
Red Tomato
The Food Trust
Wholesome Wave

FOR-PROFIT ORGANIZATIONS

City Fresh
Corbin Hill Road Farm
FoodEx
La Montanita
OK Food Cooperative
People's Community Market

NETWORK LEADERS

BALLE
Confluence Philanthropy
Eric DeLuca
Roots of Change
Rural Support Partners
SAFSF
Slow Money (National)
Toniic

INTERVIEW AND SURVEY QUESTIONS

INTERVIEW QUESTIONS

1. What areas are most critical to creation of regional food systems?
2. What parts of supply chain are receiving most attention and/or funding and where is it coming from?
3. What parts of the supply chain are there gaps in funding/attention? Where is funding needed?
4. What areas (i.e. different parts of supply chain, diff kinds of businesses) is/are there a need for innovative financial vehicles (or anything outside of grants)?
5. How have you seen work financed thus far (what kinds of funding orgs are receiving/how are funders deploying their money)?
6. What are some examples of innovative financing models that you have seen?
7. What types of financing do you see as needed?
8. What types of organizations do you support/do you see receiving support (non/for-profit, early/mid/late stage, etc.)?
9. What technical assistance needs (or other needs/barriers outside financing) do you see across the supply chain?
10. What are your opinions on food hubs and their financing needs (i.e., non-profit versus for-profit, etc.)?
11. What strategies do you use/have you seen for addressing issues of access and justice/equity?
12. What policy work needs to be done
13. How are policy issues affecting the flow of capital?
14. What things would accelerate the flow of capital?
15. What things are blocking the flow of capital?
16. Where would you like to see funders directing resources and through what mechanisms?
17. What other general recommendations do you have for funders?
18. What do you see as the role of foundations in funding regional food systems?

SURVEY QUESTIONS

1. What types of sustainable food & agriculture investments (no grants) have you made/received?
- Direct Guarantee
- CDFI Guarantee
- Direct Equity
- Venture Equity Fund
- Private Equity Fund
- Direct Senior Debt
- Direct Subordinated Debt
- Debt Fund
- Revenue Sharing

2. What amount of money do you yearly invest/have you received (no grants) in sustainable food & agriculture?
- $0-100,000
- $100,000-500,000
- $500,000-1,000,000
- $1,000,000-5,000,000
- Over $5,000,000

3. When evaluating an investment in sustainable food & agriculture, do you look at any of the following/have you been asked any of the following?
- Employee Wages within the Org.
- Health Benefits for Employees within the Org.
- Advancement Opportunities for Employees within the Org.
- Producer/Supplier Employee Wages
- Producer/Supplier Health Benefits
- Producer/Supplier Advancement Opportunities
- Fair Trade Certification
- Food Access for Under-served Communities
- Soil Quality
- Organic Certification

4. What do you see as needed in order to increase your level of investing in sustainable food & agriculture?
- Technical Assistance
- More Mature Enterprises Seeking Capital
- Education to Better Understand Investee/Entrepreneur Needs
- More Appropriate Funding Vehicles
- Ability to Collaborate with other Funders/Layer Capital
- Deal Sourcing Assistance
- Mapping of the Sustainable Food & Ag Space
- Nothing - Will Not Allocate More Money

GLOSSARY OF KEY TERMS

alternative/healthy food system
When used in this report, these terms refer to food system(s) being created outside of or complementary to the mainstream/industrial system. The common thread of these systems is that the people, organizations, and businesses involved are trying to address the negative environmental, social, and economic impacts of the mainstream/industrial system by creating or rebuilding systems that are inherently sustainable (environmentally, socially, financially) and just.

capital
Financial resources, including revenues, grants, debt, equity, in both their traditional form as well as more innovative configurations.

direct marketing
Sales of product by farmers directly to consumers, restaurants, retailers, or institutions, rather than selling by using middlemen in a supply chain. (Martinez, 2010)

intermediaries
Financial institutions or funds that act as middlemen between funders/investors and businesses/organizations seeking capital. These entities receive, manage, and deploy funds and many also offer technical support to recipients of capital.

local
A system based on marketing arrangements between producers and consumers that are more direct than in other systems. This includes farmers selling directly to consumers on the farm, at farmers' markets, or through CSAs, and selling to restaurants and schools in their area. While there is no consensus on a definition of "local" or "local food systems" in terms of
the geographic distance between production and consumption, some of the common geographic boundaries given are: within 50, 100, or 400 miles of where one lives. (ERS - Local Foods)

mainstream/industrial food system
When used in this report, these terms refer to the food system on which the majority of the people in the U.S. depend for the production of food; this system is characterized by consolidation, concentration, vertical integration, national and global-level supply chains, and multi-national corporations. This system is not "bad", but has many negative impacts on farmers and consumers - both those who are involved in it directly and those who are not.

mid-sized farm*
USDA farm classifications suggest that a small farm is one with gross sales up to $1,000,000.

network leaders
Organizations that facilitate regional or national communication, coordination, and collaboration among stakeholders interested in food system development.

regional
"A system in which as much food as possible to meet the population's food needs is produced, processed, distributed and purchased at multiple levels and scales within the region, resulting in maximum resilience, minimum importation, and significant economic and social return to all stakeholders in the region." (Ruhf/Clancy) Regional systems are able to support long-term connections between farmers and consumers while also meeting the economic, social and health and environmental needs of communities in a region. (Leopold) Compared to local, regional is generally larger both geographically and in terms of functions: it provides greater volumes and variety of product, it involves more complex supply chains, it includes more market outlets for products, and also involves broader food system elements such as land use and policy. (Ruhf/Clancy)

scaling up
"Scaling up" often means to expand something (a business, a program, a campaign, etc) simply to a bigger size. In this report, we more specifically mean to grow while staying within the definition of sustainability. This term also specifically means to increase the capacity of regional food systems to meet higher levels of consumer demand, which can be done through the growth of single operations, but also through the replication of models, operations, or systems.

small farm*
USDA farm classifications suggest that a small farm is one with gross sales below $100,000.

supply chain
The system of organizations, people, activities, information, and resources involved in producing and/or moving a food product to the customer. (Grocery Manufacturers Association)

sustainable
"Sustainability rests on the principle that we must meet the needs of the present without compromising the ability of future generations to meet their own needs. Therefore, stewardship of both natural and human resources is of prime importance. Stewardship of human resources includes consideration of social responsibilities such as working and living conditions of laborers, the needs of rural communities, and consumer health and safety both in the present and the future. Stewardship of land and natural resources involves maintaining or enhancing this vital resource base for the long term." (University of California Sustainable Agriculture and Research Education Program, http://www.sarep.ucdavis.edu/sarep/about/def)

** The definitions of small/mid-sized farm are relative. These terms are defined differently by the USDA, various farm and food-focused nonprofit organizations, and farmers themselves. While the lines are often fuzzy, the parameters above give a sense of the scale being referred to when the terms are used in this report.*

BIBLIOGRAPHY

An, Ruopeng, Sturm, R., "School and Residential Neighborhood Food Environment and Diet Among California Youth." Rand Corporation, Santa Monica, CA. 16 January 2012.

Bonitz, John, Roehrig, J. Farmer and Lender Project, Strategies to Sustain Agriculture and Enhance Rural Development in North Carolina. Rural Advancement Foundation International-USA, 2006. http://www.rafiusa.org

Cantrell, P., Conner, D., Erickcek, G., Hamm, M. *Eat Fresh and Grow Jobs.* Michigan Land Use Institute and the C.S. Mott Group for Sustainable Food Sytems, 2006.

Cantrell, P. and Lewis, R. *Food System Infrastructure: Michigan Good Food Work Group Report No. 5 of 5. East Lansing, MI.* C.S. Mott Group for Sustainable Food Systems at Michigan State University. 2010. Available from www.michiganfood.org.

Clancy, K. and Ruhf, K. 2010. "Is Local Enough? Some Arguments for Regional Food Systems." *Choices: The Magazine of Food, Farm, and Resource Issues*: 1-5. Retrieved from: http://www.choicesmagazine.org/magazine/print.php?article=114.

Cocciarelli, Susan. Financing Sustainable Agriculture in Michigan. Unpublished white paper, C.S. Mott Group for Sustainable Food Systems, Michigan State University, December 2009. Retrieved from: www.mottgroup.msu.edu.

Cocciarelli, Susan, Suput, D., Boshara, R. *Financing Farming in the U.S.: Opportunities to improve the financial and business environment for small and midsized farms through strategic financing.* The W.K. Kellogg Foundation Food and Community Program. July, 2010.

Community Involved in Sustaining Agriculture (CISA). 2011. *Scaling Up Local Food: Investing in Farm & Food Systems Infrastructure in the Pioneer Valley.* South Deerfield, MA. Retrieved from: www.buylocalfood.org/page.php?id=16.

Conner, D.S., and R. Levine. 2007. "Circles of Association: The Connections of Community-Based Food Systems," Journal of Hunger and Environmental Nutrition, Vol. 1, pp. 5-25.

Day-Farnsworth, L., McCown, B., Miller, M., Pfeiffer, A. 2009. "Scaling Up: Meeting the Demand for Local Food." UW-Extension Ag Innovation Center and UW-Madison Center for Integrated Agricultural Systems, Madison, WI.

Dickie, Amy. Local Foods, *A Guide for Investors and Philanthropists.* California Environmental Associates, 2010.

Fair Food Network. *Leadership and Investment for Community-Based Food Systems.* Report from Convening in Holyoke, MA and Dublin, NH, March 2010.

Farm to Plate Strategic Plan. The Vermont Sustainable Jobs Fund, July 2011.

FarmsReach. *Building Regional Produce Supply Chains: Helping Farms Access & Sell to Multiple Channels, Helping Large-Volume Buyers Access Regional Foods.* 2012.

Golan, E., Steward, H., Kuchler, F., Dong, D. *Can Low-Income Americans Afford a Healthy Diet?* U.S. Department of Agriculture, Economic Research Service, Amber Waves. November 2008.
Green For All. *Green Jobs in a Sustainable Food System.* 2011.

Hanson, J.D., Hendrickson, J., Archer, D. "Challenges for Maintaining Sustainable Agricultural Systems in the United States". *Renewable Agriculture and Food Systems.* 23(4): 325-334. 4 July, 2008.

Headwaters Group and Sustainable Agriculture and Food Systems Funders. *Trends in Sustainable Agriculture and Food Systems Funding.* 2007.

Henderson, J. and Akers, M. Agricultural Finance Databook, National Trends in Farm Lending. Kansas City: Federal Reserve Bank of Kansas City, 2011. http://www.kansascityfed.org/publicat/research/indicatorsdata/agfinance/2011-04-ag-fin-db.pdf

Joshi, A., Kalb, M., Beery, M. 2006. *Going Local: Paths to Success for Farm to School Programs.* National Farm to School Program, Center for Food and Justice (Occidental College), and Community Food Security Coalition.

King, Robert P. et al. 2010. *Comparing the Structure, Size, and Performance of Local and Mainstream Food Supply Chains.* U.S. Department of Agriculture, Economic Research Service, ERR-99. Washington, D.C.

Kirschenmann, F., Stevenson, S., Buttel, F., Lyson, T., Duffy, M. *Why Worry About the Agriculture of the Middle?* A White Paper for the Agriculture of the Middle Project.

Kohn, D. and A. White. "The Challenges of Family Business Transition", Horizons, Volume 13, No.5, September/October 2001. http://www.reap.vt.edu/publications/horizons/hor13-5.pdf

Lee, Helen. "The role of local food availability in explaining obesity risk among young school-aged children", Public Policy Institute of CA. *Social Science & Medicine.* 74(8) :1193-1203. 2012

Lewis, Chelsea Bardot. 2010. *An Assessment of New England's Large Animal Slaughter and Processing Capacity.* Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA.

Long, Maud-Alison, Pomares, R., Pons, E. *Promoting Sustainable Food Systems Through Impact Investing.* The Spring Creek Foundation.

Low, S. and Vogel, S. 2011. *Direct and Intermediated Marketing of Local Foods in the United States.* U.S. Department of Agriculture, Economic Research Service, ERR-128. Washington, D.C.

Lusher Shute, Lindsey. *Building a Future with Farmers: Challenges Faced By Young, American Farmers and a National Strategy to Help Them Succeed.* National Young Farmers' Coalition, 2011.

Martinez, Steve et al. 2010. *Local Food Systems: Concepts, Impacts, and Issues.* U.S. Department of Agriculture, Economic Research Service, ERR-97. Washington, D.C.

Moukad, John. *Small Farms in a Changing Credit Landscape.* Prepared for The Carrot Project, 2010.

NIOSH. Pesticide Illness & Injury Surveillance. Accessed 7/12/12. http://www.cdc.gov/niosh/topics/pesticides/

Ogden, Cynthia, Carroll, M. *Prevalence of Obesity Among Children and Adolescents: United States, Trends 1963–1965 Through 2007–2008.* U.S. Centers for Disease Control and Prevention. June 2010. Retrieved from: http://www.cdc.gov/nchs/data/hestat/obesity_child_07_08/obesity_child_07_08.htm

Packaged Facts: Fresh and Local Food in the U.S., MarketResearch.com, New York, NY. May 2007

Peters, C.J., et al. 2008. "Foodshed Analysis and Its Relevance to Sustainability". *Renewable Agriculture and Food Systems.* (24): 1-7.

Pirog, Rich, Bregendahl, C. *Creating Change in the Food System: The role of regional food networks in Iowa.* Michigan State University Center for Regional Food Systems. March 2012.

Richman, Nessa. *Financing Healthy Food Options: Implementation Handbook, A Food Systems Overview.* U.S. Treasury. 30 September 2011.

Sustainable Agriculture and Food System Funders. *Trends in Sustainable Agriculture and Food Systems Funding 2003-2006.* 2007.

The Carrot Project. *Lessons Learned: 2009 Microloan Fund for New England Farmers.* 2009.

The Carrot Project. *Are Northeast Small Farmers in a Financing Fix? Research Results on Financing Gaps and Program Opportunities.* 2008.

Thompson, E., Jr., Harper, A.M., Kraus, S. Think Globally—EatLocally: San Francisco Foodshed Assessment, American Farmland Trust. 2008. Retrieved from: http://www.farmland.org/programs/states/ca/Feature%20Stories/San-Francisco-Foodshed-Report.asp

U.S. Department of Agriculture, Economic Research Service. Briefing Room: Food CPI and Expenditures. 25 January, 2012. Retrieved from: http://www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/

U.S. Department of Agriculture, Economic Research Service. Briefing Room: Food Marketing System in the U.S.: Food Retailing. 17 November , 2010. Retrieved from: http://www.ers.usda.gov/Briefing/FoodMarketingSystem/foodretailing.htm

U.S. Department of Agriculture, Food and Nutrition Service. 2010 USDA Farm to School Report. Retrieved from: http://www.fns.usda.gov/cnd/f2s/

U.S. Department of Agriculture, Food and Nutrition Service. National School Lunch Program Factsheet. October 2011. Retrieved from: http://www.fns.usda.gov/cnd/lunch/.

U.S. Department of Agriculture, Know Your Farmer, Know Your Food Compass: Healthy Food Access. 2012. Retrieved from: http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=KYF_Compass_Healthy_Food_Access.html

U.S. Department of Agriculture, National Agricultural Statistics Service. 2007 Census of Agriculture, Fact Sheets: Farm Numbers Overview. Retrieved from: http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/Fact_Sheets/Farm_Numbers/

U.S. Department of Agriculture, National Agriculture Statistics Service, Agricultural Land Values and Cash Rents, Final Estimates 1999-2003. 2004. Retrieved from: http://usda.mannlib.cornell.edu/usda/nass/SB993/sb993.pdf

U.S. Department of Agriculture, National Agriculture Statistics Service, Land Values and Cash Rents 2010 Summary. 2010. Retrieved from: http://usda.mannlib.cornell.edu/usda/current/AgriLandVa/AgriLandVa-08-04-2010.pdf

U.S. Department of Agriculture, National Agricultural Statistics Service. *Livestock Slaughter, 2009 Summary*. 2010.