

FoodMap NY

Leveraging Private-Sector Innovation
and Investment for Food Security

RESEARCH SPOTLIGHT REPORT

Food Finance

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About the New York University Leonard N. Stern School of Business, Center for Sustainable Business

The NYU Stern Center for Sustainable Business (NYU Stern CSB) was founded on the principle that sustainable business is good business. We provide education, conduct research, and influence industry practice by proving the financial value of sustainability for business management and performance. At CSB, we aim to equip future and current corporate leaders with updated business frameworks that embrace proactive and innovative mainstreaming of sustainability, resulting in competitive advantage and resiliency for their companies as well as a positive impact for society. To learn more visit stern.nyu.edu/sustainability or email sustainablebusiness@stern.nyu.edu.

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Introduction

More than 44 million Americans experience food insecurity today, including more than 2.2 million people in New York State alone. Despite decades of government and philanthropic efforts, levels of food insecurity continue to rise, depriving millions of a decent quality of life, and costing our nation billions in preventable health care expenses.¹ In response to this crisis, federal and state leaders have called for private sector collaboration to improve food access and affordability; integrate nutrition and health; empower consumers to make, and have access to, healthy choices; support physical activity for all; and enhance nutrition and food security research.²

The NYU Stern Center for Sustainable Business, in partnership with Cornell University, and with the support of Mother Cabrini Health Foundation, sought to better understand where private sector interventions and investment could enhance food and nutrition security in New York State (NYS).

Research was conducted between April 2022 and May 2023 to assess current knowledge, efforts, and opportunities for private sector engagement in six focal areas:

1. Controlled Environment Agriculture
2. Supply Chain & Infrastructure
3. Healthy Food in Retail Environments
4. Food and Nutrition Assistance Programs
5. Food as Medicine
6. Food Finance

This report focuses on research and opportunities in the area of **Food Finance**. Lack of access to capital is a key barrier to expansion faced by small farmers and food businesses, especially those from marginalized communities. Small farmers and food businesses are commonly unable to reach larger urban markets, but they can play a critical role in supporting access to healthy affordable food. We seek to understand what kinds of capital, currently unavailable, that small farmers and food businesses need to succeed, and identify sources of this capital, including CDFIs, impact investors, other lenders, as well as philanthropy that are able to counteract this barrier.

Separate reports for each of the other areas are available here:

[view resources](#)

Background

The food system comprises a wide range of activities across the value chain, from growing and processing, to distributing and selling. Each link can support greater access to healthy and affordable food, reduce food insecurity, and help build healthy, sustainable, and economically resilient communities.³ A diverse food system is, however, correlated with diverse capital needs. Many financial barriers exist that limit food system work and growth. Access to capital is critical for farms and food-related businesses, especially smaller ones. Greater access can be achieved through both public and private investment in businesses and projects.

The United States Department of Agriculture (USDA) is the primary provider of grants, loans, and other support for farms and food-related businesses. Many government initiatives in NYS also address food system investment. For instance, the NYS Department of Agriculture and Markets (NYSDAM) provides various funding opportunities, including “connecting farmers with new markets; supporting marketing efforts for producers and retailers; getting local, healthy foods into schools; improving infrastructure on fairgrounds and in companion animal shelters statewide; ensuring climate resilient farming practices; and more.”⁴



Defining the Opportunity

Aside from government funding, there remains a considerable demand and many opportunities for private investors to support the NYS food system. Traditional and emerging development finance tools can help businesses gain access to capital on a broad scale, but, as we will highlight in the following section, more capital is needed for specific projects, as well as information on how to access it.

Food-related businesses often have trouble accessing capital and are not in a position to take on conventional financing due to a lack of business expertise and other capacity limitations. According to a research study by the Center for Agricultural Development and Entrepreneurship (CADE) that explored the funding needs of NYS' farm and food businesses, some agribusiness owners said they prefer not to take on debt (19%), noting "down payments are too high" (16%), "interest rates are too high" (13%), or "my debt to income ratio is too high" (9%).⁵ Due to the variety of food system models, lenders also have difficulty understanding the financial metrics and operations of these businesses, making it harder for the businesses to obtain credit. Therefore, a project's impact on the local community is not usually considered.⁶ Additionally, many disparities emerge in traditional lending practices. According to the 2017 USDA Census of Agriculture, and the Black Farmer Fund, there are only 139 Black farmers in NYS, compared to 57,000 white farmers statewide, and Black farmers are making negative \$900 while other farmers are making \$42,000. In the U.S., business owners of color have less access to capital than their white peers. Traditional financial institutions often require applicants to provide credit histories, income and employment histories, collateral, savings, and investments, to demonstrate their ability to repay a loan, which contributes to further inequity. Additionally, inaccessible, unaffordable, and predatory financial services in low-income communities present serious impediments to economic advancement.⁷

For these reasons, stakeholders commonly acknowledge a financing gap that exists because existing financial tools are not well-structured for food system solutions. There is a need for gap financing for farmers and food-related businesses that differs from the offerings currently provided by traditional banks and financial institutions. These lenders could primarily benefit farmers and food-related businesses by being more flexible and allowing for greater risk in exchange for greater impact. For instance, farmers typically cannot afford the interest rates that banks require; they need lower interest rates because their livelihood depends on the success of the loan.

According to an agriculture-agency representative cited in CADE's study: "Farmers operate in a risky industry, and loans as currently structured do not present an acceptable form of risk sharing. If entrepreneurs are correct in their estimation of the potential impact of access to credit, the borrower's unwillingness to take loans (due to risk aversion) coupled with the funders' unwillingness to provide grants (due to their own risk aversion) leads to a classic credit market imperfection problem. A funded mediating agency that can bear some of the risk could solve this. Economic development finance agencies can serve this role in ag and non-ag settings."⁸

Private Capital Solutions

A variety of private capital solutions are available to farmers and food-related businesses in NYS. While some are local, most private funding sources consist primarily of loan and grant programs that are not specific to NYS and instead have a financing geographic area of the U.S. The most common solutions we have identified and classified include foundations; banks; community investment funds; crowdfunding; venture capital (VC) funds; donor-advised funds (DAFs); and community development financial institutions (CDFIs). We will provide an overview of each solution, highlighting some organizations that work in NYS.



Foundations

A foundation is a nonprofit or charitable trust that makes grants to organizations, institutions, or individuals for charitable purposes.⁹ Foundations play a significant role in financing the food system. They can make impact investments that aim to generate financial and social returns to complement grants, partnerships, advocacy efforts, and other philanthropic tools, in alignment with their grantmaking priorities.¹⁰ Some foundations have engaged in impact investing by using program-related investments (PRIs) and mission-related investments (MRIs) to integrate their grant and investment capital.¹¹ PRIs are foundation investments made with the primary purpose of making an impact, not generating income. In the U.S., PRIs can legally count toward a private foundation's annual distribution requirement. While they can be market-rate investments, PRIs have historically been used to provide investments, such as loans and equity, that are below market rate or offer more flexible terms. In this way, PRIs can result in collaborative investments and/or take on risks that enable traditional investors to participate. Although PRIs can legally be counted toward a 5% minimum distribution, some foundations make PRIs from their endowments, preserving their required distribution for grants, or distributing more than 5% for charitable purposes. MRIs typically refer to risk-adjusted, market-rate impact investments made from the foundation's endowment or corpus.¹²

Many foundations work to advance the U.S. food system. Foundation priorities include increasing opportunities for outdoor activity; reducing environmental health hazards; building stronger communities; creating a robust, healthy food system; and protecting the Earth's beauty and bounty.¹³ The Kroger Co. Zero Hunger | Zero Waste Foundation supports initiatives that "create communities free of hunger and waste." The foundation's Innovation Fund aims to fill the gap in philanthropic funding required to support entrepreneurs and innovators with solutions that can improve food security and prevent food waste.¹⁴ Through grantmaking, The Rockefeller Foundation launched a strategy to support and incentivize food systems around

the world to produce and consume good food. The foundation is investing in programs that help medical and educational institutions establish standards for the food they procure to advance public health and the public good; it is also investing in “food is medicine” programs that help prevent, manage, and treat illness.¹⁵

From the point of view of farm and food businesses that seek to access foundation grants, many find funder requirements too restrictive or burdensome, and get scared away. When asked why entrepreneurs have not applied for grants, CADE found the most prevalent response to be, “Most grants are reimbursement based” and “I don’t have enough capital to front the costs.” Another issue raised was “too much paperwork” (19%). Some said “I’m not sure how [to apply]” (16%).¹⁶ In terms of how easy or difficult it is to fill out grant or loan applications, the majority said it was difficult or very difficult. In an interview, one farmer from Schoharie County explained her challenge in accessing funding: “Grant applications are overwhelming for people who aren’t experienced in doing that kind of thing or don’t have the time, so many of us feel shut out of these opportunities. I keep trying to contact the funders or even ag agency reps to help me with my application, but no one responds. As I’m told, it can take 100 hours to prepare a federal grant application within a month timeline. What farmer has that kind of time, and can manage with no help? It would be nice if applications were simpler, tailored more for us, and there was someone at the funding agency who could offer assistance to applicants.”¹⁷ Significantly, many entrepreneurs also felt pessimistic about going through the long process of applying but not getting an award due to high competitiveness and limited funding pots, and were thus dissuaded from even trying (19%).¹⁸

Another farmer from Delaware County noted that many foundations that are interested in food system development focus only on 501(c)(3) nonprofits, rather than food producers that are structured as businesses: “Most [grant] funding goes toward ag research or farm service agencies [with 501(c)(3) status]. They suck up all the dollars and have big salaries, while farmers are still struggling. Imagine if all those millions in funds could go instead directly to farmers as an investment in our businesses to grow. If funds went directly to us, NYS agriculture would be dramatically different!”¹⁹ CADE concludes that if private foundations want to truly invest in more equitable food systems, dollars must be invested directly into farm and food businesses as businesses, not only into the nonprofit sector.

Many (largely publicly funded) economic development grant opportunities for businesses are limited to those that create a large number of jobs. Farms are not big job creators, but they support jobs among connected businesses. According to a mid-tier supply chain business owner in Seneca County, “Most [grant] funding programs are based on job creation and I can’t afford to employ more people. Last year, I paid \$70,000 for workers compensation insurance for ten full-time employees, on top of social security/disability.”²⁰ This message was echoed by an ag-agency representative: “State funders want to provide business grants for job creation. That might work for some sectors, but farms are not big job creators. However, farmers’ success creates jobs in connected industries—like for tractor businesses, seed or feed supply outlets, truckers, food retail outlets that sell our food, etc. State funders and legislators need to understand economic development in a more holistic way, so that farmers can be recognized for what they contribute AND be eligible for economic-development grants that are beyond counting the number of jobs created directly by that business.”²¹ CADE’s study concluded that agribusinesses should be given an exception to job thresholds, recognizing the downstream ripple effect.

Banks

Banks are considered a traditional lender. While many banks do provide loans to farmers and food-related businesses, these loans are often unaffordable, with many barriers embedded into the underwriting process. For instance, small food-related businesses often cannot provide the collateral of property or other assets, or already have a high debt-to-income ratio, making them ineligible for additional loans. In addition, many people cannot easily access any banking services at all. There has been a growth of banking deserts in lower-income areas, despite the demand for financial services.²²

Compared to traditional bankers that see farms and food businesses as more risky, Walden Mutual Bank is more receptive to engaging with these businesses and thinking more creatively and flexibly about a structure that might meet their needs. Walden Mutual is a new sustainable farm- and food-focused digital bank that was recently approved by the Federal Deposit Insurance Corporation (FDIC) and the New Hampshire Banking Department. The bank is open to those wanting to support a more sustainable and equitable local food system. It has made deposit accounts available and has built a lending pipeline of over \$50 million, working with individuals across the food system, ranging from farms and processors,

to consumer brands and businesses, at the heart of New York and New England's sustainable food industry. Mutual banks do not have shareholders and are instead owned and governed by the community. Using innovative "Special Deposit Shares," Walden Mutual has raised \$24 million from more than 230 community investors and puts this investor money directly into the community by issuing loans to local sustainable farms and food businesses around the region.²³ Through Grow Local accounts, investors can currently earn 2.5% APY on all balances.²⁴ Certificates of Deposit return between 3.25% to 4.0%, depending on the term length.²⁵

Community Investment Funds

Community investment funds enable community members to invest in a fund that in turn invests in the local community. These funds allow communities to generate local wealth through a cycle of investment, growth, profit for community investors, and reinvestment.²⁶

For example, the Black Farmer Fund provides grants and low-interest loans to Black-owned food and farm businesses in NYS. Black farmers, herbalists, distributors, restaurateurs, caterers, composters, and other food-related businesses also receive technical assistance, networking, and policy support. Funding focuses on creating a racially equitable, economically thriving, environmentally sustainable regional food system.²⁷ Another example is Pioneer Valley Grows Investment Fund (PVGrows), a Franklin County-based investment fund that supports local farmers and food entrepreneurs by offering flexible financing and technical assistance. Community members themselves serve as the investors in these businesses, to strengthen the local food economy by generating more local jobs and improving access to healthy food. Residents of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, and Rhode Island are eligible to invest in the fund. Once PVGrows receives an investment, it is added to the community fund until a local farm or food business applies for financing. Once financing is approved, the investors receive returns that are paid out annually. Investing in the fund is associated with the same risks as investing in Wall Street, but community impacts are tangible and meaningful.²⁸

Crowdfunding

Crowdfunding secures capital for a project or venture by raising financial contributions from a group of people. This process is almost exclusively done online, giving small businesses, entrepreneurs, and organizations access to capital at a very broad level. Many forms of crowdfunding exist, including programs that are based on rewards, donations, equity, or debt.²⁹

Similarly, there are many different crowdfunding platforms, with different funding limits and mission focus. For example, Credibles works by providing businesses with crowdfunding in exchange for store credits to their funders, and continuous funding is also available for working capital, equipment, staff, etc. Credibles' funding focuses on small and sustainable food-related businesses. The financing geographic area is worldwide and the funding limit is \$1M.³⁰ Another platform, Localstake, helps small, growing businesses analyze their financing options, connect with investors, and raise capital. Localstake is aimed at businesses that are close to or already generating revenue. Funding commonly focuses on food and beverage producers, franchises, retailers, consumer-product manufacturers, restaurants, breweries, and distilleries. Generally, the platform's most successful fundraisers are for businesses that form connections with consumers and their communities. Localstake is most suitable for businesses that are looking to raise between \$50,000 to \$5 million in funding. The financing geographic area is the U.S.³¹ Finally, Kiva follows a different crowdsource funding model, offering 0% loans to small businesses worldwide for up to \$15,000, and providing loans specifically for agriculture.³²

Venture Capital (VC) Funds

VC is a form of private equity and a type of financing provided to start-ups and small businesses that investors believe have long-term growth potential. VC generally comes from individual investors, investment banks, or other financial institutions.³³ VCs investing in agriculture and food have primarily focused on agricultural technology (AgTech or AgriFoodTech), which refers to any technology or innovation in farming and food production that aims to improve or disrupt the global food and agriculture industry. The AgTech sector is a \$7.8 trillion industry. According to McKinsey, it has not kept up with the pace of innovation and is the least digitized of all major industries. This presents a huge opportunity for venture capitalists and accelerator funds.

AgTech start-ups aim to solve a range of challenges, from farm efficiency and profitability, and unsustainable meat production, to food waste and CO2 emissions.³⁴ According to the 2022 AgFunder Global AgriFoodTech Investment Report, VCs invested \$51.7 billion globally in agricultural technologies in 2021, an 85% increase over the previous year. The U.S. was the largest AgTech investor, accounting for 41% of the capital investments (\$218 billion) and 34% of the deals (1,062).³⁵

2021 Fastest Growing AgTech Categories	Amount Invested (\$)	Number of Deals	Year-On-Year Growth
Online grocery stores (eGrocery)	\$18.5 bn	343	188%
Innovative Food	\$4.8 bn	424	103%
Online Restaurants & Meal Kits	\$1.2 bn	302	102%
Cloud Retail Infrastructure	\$4.8 bn	185	97.5%

NYS was the second largest AgTech investor, accounting for \$2.5 billion, following California, at \$9.7 billion. Top deals in NYS included vertical farmer Bowery Farming, midstream-tech venture Augury, biomaterials company Modern Meadow, and climate insights provider Gro Intelligence.

Donor-Advised Funds (DAFs)

DAFs are charitable giving vehicles that invest contributions, provide a tax deduction, and allow donors to select causes and charitable organizations to support, without a required market-rate return.³⁶ Donors invest in a loan pool that the DAF runs and for which it acts as the financial intermediary. DAFs offer a lot of flexibility, but the biggest constraint for these donor-driven funds is the imagination of the donors themselves. Therefore, DAFs may be a valuable capital source for farms and food-related businesses, but that depends on an individual donor's wishes within the DAF.

It is important to understand the metrics and current landscape of DAFs since this pool of capital continues to experience record growth and is often used for impact investments or PRIs. In particular, PRIs help fund BIPOC owners of small businesses and managers of traditionally underfinanced projects. The results of the 2023 Donor-Advised Fund report, published by the National Philanthropic Trust (NPT), show that DAF donors granted \$45.74 billion to qualified charities in 2021, a 28% increase from the previous year, and the grant payout rate was 27.3%.³⁷ This is the fastest growth on record for contributions and charitable assets. According to NPT, \$234 billion of these funds are in DAF charitable assets. NPT's 2023 DAF report breaks down the metrics:³⁸

	2020	2021	Change
Charitable Assets	\$167.81	\$234.06	39.5%
Total Grants	\$35.68	\$45.74	28.2%
Total Contributions	\$49.58	\$72.67	46.6%
Payout Rate*	24.2%	27.3%	12.7%
Average DAF Account Size	\$167,748	\$182,842	9.0%
Number of DAF Accounts	1,007,745	1,285,801	27.6%

*Following the Candid model for calculating payout rates for independent foundations, the payout rate for donor-advised funds is this year's grants divided by last year's total assets.

Community Development Financial Institutions (CDFIs)

CDFIs are private financial institutions with a primary mission of promoting community development in low-income and economically distressed communities through individual and small-business lending and outreach programs.³⁹ CDFIs provide these communities with credit (loans), capital (grants), and financial services that are often unavailable from traditional financial institutions. They seek to develop local projects that will improve the economic and social wellbeing of these neighborhoods. CDFIs lend to a wide range of users, including organizations; business owners and real estate developers; and individuals.⁴⁰

CDFIs have been in existence since 1973, and there are currently more than 1,300 certified ones nationwide. The CDFI industry manages more than \$222 billion.⁴¹ There are four CDFI structures: community development banks, community development credit unions, loan funds, and VC funds. However, the vast majority of CDFIs are either community development credit unions or loan funds. Although these structures share the same mission, each has a different business model and legal structure. CDFIs are primarily nonprofit entities, with very few for-profit actors in the space.⁴²

CDFIs commonly receive funding from both public and private sources. Public funding sources include various U.S. federal government departments as well as state programs. Private funding sources include independent foundations, banks, and intermediaries.⁴³ CDFIs will often use public funding to attract private market capital.⁴⁴ Many food-system projects will involve multiple funding streams, and CDFIs not only raise capital but also blend the streams together and offer appropriate financing packages to their lending areas and clients.⁴⁵ Therefore, CDFIs are great potential partners for food-related businesses because they are flexible in how they provide financial services. CDFIs can customize their financial offerings based on a business' financial profile and needs. Food-related businesses can access relevant CDFIs in a variety of ways including referrals by banks, word of mouth, or online searches.

Additionally, CDFIs, such as the one we consulted, partner with community organizations and provide technical assistance. To receive certification, CDFIs are required to provide service other than financing, including technical assistance. Stakeholders have emphasized the importance and value of providing technical assistance to farmers and food-related businesses. A nonprofit community lender we spoke to found that farmers typically need a lot of resources and help, especially on the business side. Another NYS fund noted that providing technical assistance also allows for more equitable access to capital.

Some stakeholders believe, however, that CDFIs often mirror conventional banks by remaining risk-averse, underwriting only the safest deals and offering fixed lending products that do not match the needs of food businesses. Despite their mission, CDFIs still need to make a return and spread their cost of capital because they often borrow from banks. Additionally, bank interest rates have been rising, driving increases in the rates offered by CDFIs. As a result, an appropriate use of private

capital may be patient/concessionary capital that helps CDFI lenders manage interest rate risk in a volatile interest rate environment, contributing to their ability to keep interest rates below market.

One CDFI we spoke to noted that while the institution analyzes each situation differently when approving a loan, it still requires 12 months of revenue, making it less attractive to start-ups. CDFIs also look at other characteristics besides financials, such as whether a business owner is coachable, accountable, and transparent. This particular CDFI told us that while it can take on more risk than more traditional lenders, its risk tolerance has tightened under new management. Another stakeholder shared that a CDFI with which he was familiar has little money that it can put at high risk because it is primarily borrowing from banks. Therefore, it is more comfortable with affordable-housing lending than with start-ups.

Additionally, CDFIs may operate as nonprofit loan funds that are governed by board members who do not reflect the communities they serve.⁴⁶ Loan funds, which are independent nonprofits, have no requirements for representation on their boards. Conversely, credit unions are formed to serve a specific community, which is either geographic or by affinity (e.g., based on a common employer, school, house of worship), and are governed by their members. In that respect, they are actually reflective of the community they serve. Credit unions are also regulated institutions, while loan funds are not. As such credit unions have to meet certain requirements related to liquidity but generally have higher leverage ratios than loan funds (meaning they are generating more loans for each dollar they have).

Experts in the field suggest that successful CDFIs should be committed to deepening their knowledge of their communities, rather than applying generic approaches and solutions. CDFIs should also listen to their communities and develop place-based solutions. A successful nonprofit community investment fund we spoke to shared that their advisory committee, which receives borrower inquiries, places a lot of emphasis on ensuring that each borrower fits the CDFI's mission and is place-based. Another successful fund we spoke to explained that its investment committee is composed of community members, and its priority in approving borrowers is their community impact.



Case Study: Cooperative Fund of the Northeast

NYS is served by more than 80 CDFIs.⁴⁷ One of these is the Cooperative Fund of the Northeast (CFNE), which is based in Massachusetts, and describes itself as “a community development loan fund that facilitates socially responsible investing in cooperatives, community-oriented nonprofits, and worker-owned businesses in New England and New York.”⁴⁸ CFNE offers development loans and technical assistance to a variety of co-ops and nonprofits that share its vision of “economic justice for all through thriving cooperative enterprise.”⁴⁹ Additionally, CFNE has set a goal of ensuring that BIPOC communities have equitable opportunities to develop co-ops, with 73% of its technical assistance hours directed to BIPOC-led co-ops.⁵⁰ CFNE’s borrowers include co-ops across all sectors and types of cooperative, such as food co-ops, worker co-ops, and housing co-ops. In 2021, food co-op borrowers represented 37% of CFNE’s loan portfolio.⁵¹ Since it was founded in 1975, CFNE has disbursed more than \$70 million via more than 1,000 loans to co-ops and community organizations without losing any investor funds.⁵² CFNE’s investors are primarily individuals, representing 44% of investor capital in 2021, who currently receive a 2% return while making a positive impact. Other capital comes from family trusts (22%), foundations (13%), faith-based organizations (7%), government (5%), banks (3%), nonprofits (3%), and co-ops (3%).⁵³ CFNE uses its investor funds to provide affordable loans with a standard low-interest rate, regardless of the co-op, to promote more equitable lending.

CFNE has received three Healthy Food Financing Initiative (HFFI) awards (which are operated by Reinvestment Fund and funded by the USDA) for its development and expansion to low-access communities throughout New England, which has allowed the fund to make over \$6.2 million in loans to 10 food co-ops. To supplement HFFI financing, CFNE launched the Food Cooperatives and Healthy Food Access program, which assists food co-ops in serving low-income communities. CFNE partners with the Neighboring Food Co-op Association, a regional food co-op association, and Hunger Free Vermont, a statewide food security organization, to “document, promote, and improve food co-op healthy food access programs.” Through this program, CFNE is working with 13 food co-ops that offer need-based discounts to over 2,000 households.⁵⁴

We spoke with CFNE about its food co-op lending in NYS. The fund noted that it is working to expand its portfolio in NYS, in response to the lack of existing lenders to support cooperative development throughout the state. Food co-ops in NYS that are already supported by CFNE include the Chatham Real Food Market Co-op in Chatham, GreenStar Food Co-op in Ithaca, North Country Food Co-op in Plattsburgh, and Syracuse Cooperative Market in Syracuse.⁵⁵ Based in the Hudson Valley, the Chatham Real Food Market Co-op is a community-owned outlet for local farm and kitchen products. The co-op aims to “provide education about Columbia County agriculture and to promote a more localized food system.” Its key objective is to strengthen its local rural community, develop food security, and help build a healthy local economy in the county.⁵⁶ The co-op launched Double Up Food Bucks New York, a program administered by the Field & Fork Network to double the buying power of Supplemental Nutrition Assistance Program (SNAP) customers. The program matches one dollar for every dollar of federal SNAP money, up to \$20 per day, to spend on fresh fruits and vegetables, with an emphasis on NYS-grown produce.⁵⁷

Before its 2010 launch, the Chatham Real Food Market Co-op was provided with a revolving line of credit by CFNE in 2008. The co-op has seen steady and now accelerating sales growth. Sales are expected to remain high, at a “new normal” level, as demographic changes wrought by the pandemic appear to be lasting. In 2021, CFNE helped the co-op purchase its building, further securing its connection to the community.⁵⁸ CFNE exemplifies how a CDFI can provide place-based organizations in NYS, such as the Chatham co-op, with low-cost capital to support economic justice and build thriving businesses that foster food security. It provides a model for other CDFIs in NYS to focus on financing small to midsize farm and food-related businesses, and work toward their shared mission of combating food insecurity.

Blended Finance

It can be challenging to secure funding from a single commercial source, especially if a business is deemed too risky for the potential return. In such cases, a viable alternative could be to attract a mix of concessional and commercial investors. Unlike commercial investors, concessional investors can assume greater risk and offer more flexible financing terms, such as longer repayment periods or junior loans, to enhance a commercial investor's risk profile. When concessional finance is combined with commercial finance, it is referred to as "blended finance." The most widely accepted definition of blended finance is "the use of catalytic capital from public or philanthropic sources to increase private sector investment in sustainable development."

Blended finance is not an investment vehicle or instrument, but rather an investment structure that allows organizations with different risk appetites to invest in the same vehicle, while meeting their own risk/return criteria, and usually achieving a social impact, too. In theory, development funding, also referred to as concessionary capital, de-risks a project and mobilizes private capital, which is then able to attain market-rate returns. In other words, concessional finance is granted to align the risk profile of the commercial financier with a risk-adjusted market-rate of return. Blended finance increases the attractiveness of risky investments in developing countries, allowing for greater development impact.

Concessional finance can take various forms. Some of the more common forms of capital include:

- **Grants:** These are enabler investments that are usually a part of a larger package, or a first tranche of investment. They can take the form of initial capital expenditures or subsidies for financing.
- **Technical assistance:** This is typically used for research or impact studies, whose findings would theoretically reduce the risk profile of a project.
- **Equipment financing:** Similar to grants, the key difference is that this form of financing is usually backed by specific equipment, which is offered as collateral.
- **Guarantees:** These are typically extended by highly creditworthy companies or institutions, to attract other lenders that can extend financing due to the reduced risk.
- **Structured finance ("first loss" piece):** This form of financing is structured in a manner that ensures that first-loss investors absorb any losses if a project fails, allowing commercial investors to recoup their money.
- **Junior/subordinated debt:** This debt financing ranks behind senior debt in case of bankruptcy and is usually offered at a higher risk.

Typical blended-finance structures comprise any of the above catalytic tools, which are then used (blended) with senior debt or equity. Catalytic capital comes from three key sources: philanthropic capital, which is usually mission-driven, can be deployed quickly, and has flexible use cases; public capital, which moves more slowly and may be subject to rigid constraints; and private capital, which focuses on returns in addition to impact, and can be deployed quickly depending on the due diligence.

Blended finance is considered effective if it results in private capital being mobilized and deployed towards the completion of risky projects. That is, on top of the impact created by each project, the success of blended finance also depends on "additionality," i.e., the role that blending plays in facilitating these results. Essentially, if blending is not necessary for an investment to proceed successfully and achieve its intended impact, and there is no additionality, then there is no reason to use concessional capital.

Other challenges with mobilizing blended finance include difficulty in structuring blended finance vehicles, due to their complex and bespoke nature; issues with aligning expectations among various stakeholders; and a lack of truly risk-tolerant capital. To mitigate these risks and prevent moral hazard, the private sector should also manage managers of traditionally under-financed projects. Furthermore, to maintain fairness, the public sector should receive a return on its risk, even if it doesn't follow a commercial risk-return pattern. In blended finance, risk-sharing is a requirement for partnerships between public and private actors, even if the risk is not equally distributed.

The use of blended finance has increased rapidly over the last decade, from 111 blended finance transactions and \$32 billion in committed capital in 2009, to 650 transactions and \$132 billion in committed capital in 2020.⁵⁹ The use of blended finance in agriculture is still somewhat nascent when compared with other sectors and is largely targeted towards smallholders in developing countries. To date, agriculture represents only 22% of the blended finance market globally and makes up less than 10% of total financing volumes.⁶⁰

Our conversations with stakeholders suggest that blended finance is difficult to implement, primarily because concessionary capital, also known as first-loss capital, is hard to find, and such capital has historically been unsuccessful in attracting commercial capital. Also, literature reviews and interviews indicate that there are few case studies of blended finance in the food system. According to one stakeholder, development finance institutions are all looking for market rate returns and are usually not willing to take on first loss, which results in private investors not being de-risked and therefore leaving them disincentivized to invest. According to another stakeholder, the original idea behind blended finance was that the United Nations Capital Development Fund (UNCDF) would use grant funding to get these small businesses over the initial funding gaps until they could get money from impact investors. While the small businesses have been successful in receiving the grant money, this success has not brought in commensurate amounts of commercial capital. A stakeholder noted that they cannot recall any case of effective blended finance in the food system, simply because the risk of businesses not being ready for commercial investment was not mitigated by grant funding. Another stakeholder agreed, and thinks that blended finance might work, but not in the food space. They note that blended finance is expensive because every loan requires a high degree of structuring, which makes it unsuitable for small business lending.

Not all stakeholders shared this opinion, however, and some had a more positive outlook. For instance, one recognized that there were financial gaps in the system and suggested that it is important to consider how private markets, philanthropy, and government can work together instead of operating in silos. To truly create impact as an impact investor, one has to be in touch with all sectors. It is critical to bring in anchor institutions such as hospitals, charter schools, and churches—which have a strong infrastructure in, and thorough knowledge of, their existing constituencies—making such partnerships a highly effective way to scale up impact.

Other stakeholders interviewed also believe that a blended finance fund is worth pursuing. One has built an integrated capital fund that serves as a model for a blended finance fund. Launched in 2018, it has catalyzed a hundred deals with no defaults. Based on this experience, this stakeholder suggested that a successful fund would need to be a composite of CDFIs, traditional finance, unregulated entities, and microlending, synthesizing different relationships with the community and bringing different levels of capital stacks. This was similar to the experience shared by a foundation we spoke to, which provided a bit of risk capital to attract bank loans and stacked different forms of capital to create a blended finance fund.



State Lender-Network Models

Some state collaboratives have brought together food system funders, such as foundations and CDFIs, and adopted a blended finance approach. These lending networks can serve as models for a similar platform in NYS. Analyzing the networks created by the Pennsylvania Fresh Food Financing Initiative, Michigan Good Food Fund, and California FreshWorks demonstrates that there is much to be learned from their experiences and best practices, to help guide a funding platform in NYS.

PENNSYLVANIA FRESH FOOD FINANCING INITIATIVE

The Pennsylvania Fresh Food Financing Initiative (FFFI) started as a statewide financing program, designed to attract grocers to underserved communities. It began in 2004 and ended six years later when all of its funds were deployed.⁶¹ FFFI is seen as a pilot for bringing the CDFI model of using subsidized capital to invest in projects deemed too risky for private sector investment alone. The State of Pennsylvania had identified food deserts and understood that access to capital was one of the reasons why grocers were not opening in those areas. FFFI's objectives were to stimulate private-capital investment in low-wealth communities; remove financing obstacles and lower operating barriers for supermarkets in these communities; reduce diet-related diseases by increasing access to healthy food; create living-wage jobs; and prepare and retain a qualified workforce.⁶²

FFFI was developed as a public-private partnership between the Commonwealth of Pennsylvania, Reinvestment Fund, The Food Trust, and the Urban Affairs Coalition. Reinvestment Fund, a CDFI, served as the administrator of the program. The state seeded the program with a \$30 million grant, which the Reinvestment Fund leveraged with \$145 million in additional investment to provide loans and grants. After receiving 206 applications, FFFI financed 88 projects across Pennsylvania, resulting in over \$73.2 million in loans and \$12.1 million in grants. Approved projects were expected to create 5,023 jobs and 1.67 million square feet of commercial space.⁶³

In 2018, the Commonwealth of Pennsylvania revitalized and recapitalized FFFI with \$1 million in seed funding through the Pennsylvania Department of Community and Economic Development (DCED), with a mission of improving access to healthy food using a holistic food system approach. FFFI is overseen by DCED and administered by The Food Trust in partnership with PA-based CDFIs and community development corporations (CDCs). Since 2018, the program has funded 40 healthy food retail projects across the state. DCED has continued to support the program with funding that is available through June 2023.⁶⁴

As a result of FFFI's success, a national version of the program was created, called the Healthy Food Financing Initiative (HFFI). HFFI is a public-private partnership administered by the Reinvestment Fund on behalf of USDA Rural Development to improve access to healthy food in underserved areas. HFFI "provides resources to eligible fresh, healthy food retailers and enterprises to overcome the higher costs and initial barriers to entry in underserved areas."⁶⁵ Reinvestment Fund manages HFFI and is responsible for leveraging private capital, establishing financing and technical assistance programs, and funding eligible projects. In addition to the USDA, HFFI has also been supported by the U.S. Department of the Treasury and the U.S. Department of Health and Human Services since 2010. HFFI has since helped leverage over \$220 million in grants and \$1 billion in additional financing, and it has also supported nearly 1,000 healthy food retail projects in over 35 states—revitalizing economies, creating jobs, and improving access to healthy food across the country.⁶⁶ HFFI provides technical assistance to eligible organizations that are planning a food retail or enterprise project that aligns with HFFI's goals. These resources may include, "support with capacity building, identification of food access needs and potential interventions, project planning, market studies, feasibility studies, business planning, financial modeling, appraisals, and community or customer engagement."⁶⁷

MICHIGAN GOOD FOOD FUND

The Michigan Good Food Fund (MGFF) is a statewide loan fund that invests in good food enterprises working to increase access to healthy food and spark economic opportunity in places that need it most. Since 2015, this initiative has provided more than \$17 million in loans and grants to support 300+ Michigan-based food businesses that grow, process, distribute, and sell healthy food.⁶⁸

MGFF is a public-private partnership with the following core partners: Capital Impact Partner, Fair Food Network, Michigan State University Center for Regional Food Systems, and W.K. Kellogg Foundation. MGFF's lending network supports different financing amounts while ensuring statewide coverage. Current lenders include Capital Impact Partners, Detroit Development Fund, Fair Food Network, Grow, Lake Trust, Michigan Women Forward, and Northern Initiatives.⁶⁹ MGFF's stakeholder board comprises entrepreneurs, business assistance providers, community partners, and lenders. The board ensures MGFF's investments reflect community needs and priorities.⁷⁰

CALIFORNIA FRESHWORKS

California FreshWorks (FreshWorks) is a loan and grant program that provides financing to food businesses that are working to increase access to affordable, healthy food in low-income and underserved communities in California.⁷¹ FreshWorks has developed a network of CDFIs that make loans to local food businesses and projects that meet FreshWorks' mission criteria while utilizing capital from their own balance sheets rather than from FreshWorks. Lending is supported by technical assistance grants that help build capacity, as well as a credit enhancement program that enables lenders to offer more flexible, well-priced loans to prospective food businesses that would otherwise be considered too risky.

In its 2018–2020 Social and Economic Impacts report, FreshWorks shared reflections and learnings. Since 2017, the program has deployed over \$80 million to food businesses across California through 36 grants, nine credit enhancements, and 21 loans.⁷² Nearly half of this capital has been directed towards low-income, low-access communities and nearly all of it has been invested in communities with poor health and well-being outcomes. In addition, 90% has been given to BIPOC entrepreneurs and 53% to female or differently identified individuals. Businesses supported by FreshWorks have either created or retained 326 jobs across California since 2018.⁷³

FreshWorks was initially launched in 2011 by The California Endowment and a coalition of public and private capital providers, industry experts, and thought partners in the healthy food space. It was later developed into a CDFI network. This decision was informed by a significant lesson learned from FreshWorks' previous iteration, "that aggregating large amounts of capital from multiple investors in a fund is ineffective if the capital and the investors' requirements are not structured to meet market demand and cannot easily be modified when needed to provide more flexible terms. In addition, it had become clear that it was difficult for only one lender to serve the financing needs of a diverse set of food businesses and projects across such a large state as California."⁷⁴

Even with the development of a lending network, FreshWorks still encountered unforeseen challenges. Its lending network comprised CDFIs with different levels of experience in healthy food finance. One CDFI, Community Vision, provided support to newer CDFI lenders in the space. These lenders had indicated a strong interest in growing their capabilities in healthy food financing and an eagerness to become involved in FreshWorks. But FreshWorks noted that lending activity and engagement were more limited than expected. Its lenders were not as active as originally envisioned, limiting the potential of the network. Of the 21 transactions made by FreshWorks, approximately half were made by Community Vision.⁷⁵ As the report explains, "This unequal participation can be attributed to a variety of factors, including the need for more concerted and consistent outreach, communication, and support from Community Vision, lack of expertise in healthy food financing, and a mismatch in the typical size and type of transactions done by members of the lenders network and opportunities in the FreshWorks pipeline." Further, "It is clear that despite the mission-alignment of partners in the lenders network, the availability of credit enhancement and grants to support food businesses and projects, more communication and technical support is needed to catalyze activity across the lenders network."⁷⁶

Despite this, FreshWorks prioritized a community-centered approach to healthy food financing, supporting food businesses and projects that promote local, healthy food to advance a sustainable food system in California. FreshWorks' lending network highlighted how CDFIs can be engaged in healthy food financing, learning from each other and making loans to businesses that may have previously been considered too risky. FreshWorks Market Making and technical assistance grants have also highlighted the importance of and need for technical assistance. According to the report, "FreshWorks remains committed to creating a more sustainable, equitable food system for all Californians, and hopes that the learnings surfaced through this evaluation can not only support its own work but the efforts of other healthy food financing initiatives across the country."⁷⁷

Since the report's publication, however, stakeholders have shared that FreshWorks has been dormant, as the second phase has sunset. Primarily, The California Endowment, which funded the second phase, shifted interests once the capital had run out, causing it to fade. Another stakeholder noted that they believed that FreshWorks failed because it did not truly understand the demand, and cautioned others against making the same mistake.

Key Learnings From Stakeholder Interviews and Recommendations

After numerous conversations with stakeholders, it is clear that a farm or food-related enterprise's business plan, size and stage of growth, governance team, and financials determine how easily it can access capital. In thinking about different projects that could address food insecurity, we believe that there is a gap in funding for smaller farms and food-related businesses—particularly funding that supports these businesses as businesses, rather than only channeling those funds into nonprofits.

Increasing access to capital for these kinds of farms and food-related businesses may occur by providing forms of gap financing paired with technical assistance. Additionally, blended finance is a powerful tool in providing lower cost capital, with a borrower pursuing different funding streams if unable to attain a more streamlined form of financing. For example, the business could raise funds through crowdfunding and grants to gain credibility prior to engaging a CDFI for additional funding. A food fund could also blend public and private capital, such as in the state models discussed.

There is potential for a financing vehicle in NYS that is focused on financing small to midsize farm and food-related businesses, and aligning with a common mission. The first option is a lending network that would rally mission-driven lenders. In a lenders network, there are no pooled funds or concrete goals. Rather, the network is a platform for CDFIs to meet, share questions, conduct referrals, and present lessons learned. For example, the Food Lenders Network is “a national network of over 20 mission-driven lenders focused on creating a more just, equitable and resilient food system.”⁷⁸ The network fosters collaboration among lenders to improve access to capital for businesses across the food supply chain.

The second option is a food fund that would more closely replicate the state models discussed and involve pooled funds. These state models, however, should only be replicated with caution, carefully addressing their lessons learned. A stakeholder shared that a more efficient state model would be a lead-agency model. This involves creating a platform of capital partners and a platform of technical assistance partners, with a lead administrator. These platforms could then tap into grant resources or credit enhancements. A successful model would partner capital with technical assistance, and take on more risk if the borrower were highly impactful and mission-aligned. A stakeholder stated that MGFF and FreshWorks demonstrated that there is a need for a significant amount of technical assistance. Long-term partnerships with borrowers that involve technical assistance and multiple rounds of funding would better enable businesses to thrive. Additionally, the fund should adopt a community-first mindset, bringing together a board that represents the community.

This type of food fund would benefit from a large seed investment, whether government or philanthropic. A grant investment with minimal restrictions could enable some grantmaking apart from investments, and also leverage partners' balance sheets to create a much larger sort of program or fund. Getting additional investment and creating a larger fund could have more of a statewide impact. Additionally, a credit enhancement pool or loan-loss reserve would help de-risk loans, and using this grant funding as a subsidy would incentivize CDFIs or other partners to participate. The seed organization must also be committed to the mission, and willing to continue investing if the fund is successful, rather than shift priorities once the money runs out, causing the fund to fade.

CDFIs—which have been repeatedly featured in our research and stakeholder interviews—are regarded as organizations that add value by providing more flexible and lower cost capital. However, we have also discovered that not all CDFIs are equally successful in their goal of reaching historically underserved populations, and some have proven problematic. While CDFIs can serve as valuable partners in a fund, there is a need to rally and educate mission- and community-driven CDFIs that prioritize impact and feature community members in their leadership. CDFIs must be vetted to ensure that they are driving equitable lending and structural change. Additionally, other lending partners should be explored.

While these existing state models were mostly successful, there is also room for significant innovation in the type of fund developed in NYS. For instance, there may be a way to include concessionary financing and catalytic capital for more pilot projects. One stakeholder suggested that a successful fund could follow a blended finance approach—a composite of CDFIs, traditional finance, unregulated entities, and microlending, which would bring together different relationships with the community and different levels of capital stacks. Stakeholders have indicated that the national HFFI initiative is relaunching with federal recovery dollars and may provide grants to state and regional programs, which could serve as a great source of capital to seed a food finance platform in NYS.

Suggestions for Action

During stakeholder interviews, we learned that to effectively address food insecurity in New York State through capital providers, it is crucial to understand the demand side. One stakeholder pointed out that the challenge for some funds, like FreshWorks, wasn't a lack of food insecurity but a shortage of sufficiently viable enterprises for investment. This insight also highlights the need for a stronger focus on building and supporting sustainable food enterprises to make effective use of available capital.

Almost all interviewees agreed that a good starting point was to map the landscape—identify investors, funds, financing mechanisms, and projects that are currently raising capital. Stakeholders agreed that these efforts could have the most impact if they convened players that are already doing this work and know each other to some degree, instead of starting from scratch.

Local community partners and leaders within specific food-system value-chain areas must be engaged to identify specific needs. Additionally, we must learn from intermediaries, banks, impact investors, and CDFIs. A detailed landscape assessment is necessary to evaluate capital needs and the types of capital required. This assessment must also determine whether projects are: seeking financing and/or foundation grants; lacking early-stage business-development capacity; seeking traditional project finance or venture capital; losing or have lost lending support from CDFIs, or having to adapt to less-favorable lending terms; and so on.

This work requires a sharp focus on the mission area, such as distinguishing between healthy food production and land stewardship versus addressing food insecurity and providing healthy food. It also involves prioritizing geographic regions and specific points along the value chain for funding. Furthermore, our approach must incorporate an equity lens that takes into account race, ethnicity, class, gender, and immigration status, among other factors. Once we identify a focus area, we can revisit the landscape map to pinpoint and prioritize funding gaps.

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