

*Funded in part by the Appalachian
Regional Commission &
Schoharie Economic Enterprise Corp.*

REGIONAL, INDEPENDENT FOOD PROCESSING

Part 1: Foreward by SEEC

Part 2: Plan & Roadmaps by LSKAHN Associates, LLC

Part 3: Project Implementation Profiles

Regional Independent Food Processing | The Plan and 7 Roadmaps

Foreward

By Schoharie Economic Enterprise Corporation (SEEC)

In response to the COVID-crisis food supply chain weaknesses, struggling and elemental rural economies and the undervalued farming industry of the Appalachian Region, Schoharie Economic Enterprise Corporation (SEEC) sought the potential to increase farm profits, induce agriculture jobs and improve access to local and regional food markets. The compiled *Regional Independent Food Processing Plan and 7 Roadmaps* with complementary *Project Implementation Profiles* and numerous reference reports combine to pave the way toward community independence, resiliency and agricultural prosperity.

In late 2021, SEEC was awarded a grant from the Appalachian Regional Commission (ARC) and matched funds to embark on a purposeful and dynamic planning process to support a secure agricultural supply chain. The targeted regional service area was defined as Delaware, Otsego and Schoharie County of New York State, the northeastern corner of the federally designated ARC. As a foundation for their commitment to agriculture, each County prepared and adopted an Agriculture and Farmland Protection Plan (AFPP) which establishes agriculture as historically and culturally the backbone of their economies. Of the three Counties, however, only Schoharie has experienced slight growth in farming measured by sales volume, number of producers and increased land in farming (Census of Agriculture, USDA 2017), highlighting the need for enhanced collaboration.

In early 2022, SEEC assembled volunteer industry partners known as the Farm and Food Advisory Council to inform the strategies through their direct experiences in the regional service area. Together, they selected a consulting team to provide a financial, marketing, and operational roadmap that would align stakeholders and identify a profitable and sustainable *Regional Independent Food Processing* business model that may be replicated throughout the Appalachian Region.

The initial areas of focus were defined as:

- **Independent dairy processing**, leveraging the highest sales volume commodity of the tri-county service area, [SUNY Cobleskill Dairy Incubator](#) and/or use of other nearby co-packing facilities
- **Protein processing**, leveraging USDA's \$500 million investment and recognized service shortage
- **Cold storage**, leveraging [market trends](#) and supply chain gaps
- **Community Supported Agriculture** (CSA), explore [new models](#) that may encourage multi-farm collaborations and address logistics issues

Through research, surveys, stakeholder engagement and Advisory Council guidance, all areas were explored. The team was especially pleased to discover numerous creative endeavors had been initiated within the tri-county service area and quickly recognized "solve logistics" as a priority theme. Several such ventures have been highlighted within the enclosed *Project Implementation Profiles*, a reflection of innovation and partnership. Collectively, the service area may glean \$6 million in new investments to reverse the loss of farmland and try new ways to rebuild critical local and regional food infrastructure. By no means is this an exhaustive list or the only undertakings. Rather, a featured cross-section of work that is meaningful to the service area and a road map for others in the Appalachian Region.

The *Regional Independent Food Processing Plan and 7 Roadmaps* with companion *Project Implementation Profiles* exceed the outcomes anticipated. LSKAHN Associates, LLC was able to engage more than 85 ag-related organizations which shaped the report while 11 featured ventures set forth a model that may be replicated throughout the Appalachian Region.

SEEC especially wishes to thank the Farm and Food Advisory Council and Southern Tier 8, its conduit to the Appalachian Regional Commission, for their guidance and deep appreciation for innovation, partnership and investment to build community capacity and strengthen economic growth in Appalachia.

The seeds to grow a more profitable and resilient agricultural industry are in our hands. With continued collaboration, we will harvest the rewards.



REGIONAL, INDEPENDENT FOOD PROCESSING:

The Plan and 7 Roadmaps

Cover Photo:
Diefendorf Family Farm
Established 1871
Schoharie County, New York

Photograph by Lynn Sandra Kahn

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REGIONAL, INDEPENDENT FOOD PROCESSING:

The Plan and 7 Roadmaps

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We wish to recognize the vision and persistence of the Appalachian Regional Commission and the Schoharie Economic Enterprise Corporation to consider food and farming from a regional and independent perspective. The Farm and Food Advisory Council, convened by SEEC for this project, provided important insights and feedback responding to early drafts of this report.

We especially thank the farmers, food producers, processors, distributors and other food supply stakeholders for the time they took from very full and long days to give us their observations and recommendations.



PREFACE

We are honored and humbled to deliver this Business Plan and 7 Roadmaps for Regional, Independent Food Processing. We believe the tri-county region has enormous potential to become a premier food shed and submit this report in that spirit.

When the consultant team started, we felt an urgency regarding the farm and food crisis. We all knew small farmers who had gone bankrupt or survived by selling their livestock or last crops. Our priority was to interview one hundred active or recent farmers, food producers and food distributors to identify challenges and opportunities. Within three months, we realized processing gaps occurred across the entire food supply chain.

Our major recommendation is to pursue the 7 Goal areas with action along the 7 Roadmaps, each with a co-chaired Working Group that provides guidance, finds resources and defines clear performance measures for that Roadmap. The Goal, Roadmap, Working Group and Performance Measures structure was adapted from Dr. Lynn Sandra Kahn's book Performance Networks: Transforming Governance for the 21st Century.¹

Our approach was very organic, especially reaching out to active farmers. No one on the consultant team was inclined to do a literature review before the interviews. Dr. Kahn is pragmatic, known for delivering a solid strategic plan, usually within 10 weeks, to be implemented the following Monday morning. Rick Osofsky, co-owner of the 3rd generation Ronnybrook Dairy Farm, is well known for saying: *Any report older than six months is useless*. Our interviewers are action-oriented. Duane Spaulding was a Schoharie County dairy farmer for 35 years (1963–1998), then a truck driver for five different feed mills in Schoharie. LouAnn Parish was a New York dairy farmer for 30 years and is a co-founder of Farm Women United,² a grass roots organization working to promote and save our small family farms. Sjana McClure-Berry is an active, certified organic crop farmer and cow-calf beef producer.

The newly published New York State VISION 2050³ begins with a sentence that sets the context for all New York State (NYS) plans including this one:

New York has a proud agricultural history and all the elements for a thriving agricultural and food future – that is profitable, regenerative, equitable, and healthy.

This report supports that vision and the conclusion that

New York needs a strategy to increase food production to feed in-state consumers and export competitively.

We especially applaud three VISION 2050 recommendations often missing from farm and food plans: climate smart practices, improved access to healthcare, and equal access to resources, education, finances and land. Our final recommendation is that the New York Governor convene a 30-day “tiger team” to adopt a plain language version of the core goals and recommendations of VISION 2050, adding one and two year goals, similar to requirements in federal planning laws.⁴

This Regional Independent report focuses on solving logistics problems across all elements of the food supply chain. The directions are for teams and Working Groups to move towards measurable Goals by accomplishing the milestones in their two-year Roadmap. The 7 Goals and Roadmaps are: Grow Food, Aggregation, Processing, Storage, Distribution, Education and Coordination. Each Roadmap has quarterly deliverables starting with Planning and Funding. The co-chairs set the performance measures with team input.

The recommended organizational structure is Goals, Roadmaps, co-chaired Working Groups and clear Performance Measures. Progress towards goals is discussed at weekly or monthly data meetings per the COMPSTAT model.⁵

That the 7 Roadmaps and VISION 2050, with such divergent approaches and timeframes, arrive at nearly the same goals and actions for implementation is a validation of both our results. And a signal to shift from analysis to action.








1 <https://www.amazon.com/Performance-Networks-Transforming-Governance-Century/dp/1567262422>

2 <https://farmwomenunited.org/>

3 <https://www.cadefarms.org/vision-2050>

4 <https://www.congress.gov/bill/103rd-congress/senate-bill/20>

5 <https://sfgov.org/policecommission/compstat>

	ROADMAP 1: GROW FOOD
	ROADMAP 2: AGGREGATION
	ROADMAP 3: PROCESSING
	ROADMAP 4: STORAGE
	ROADMAP 5: DISTRIBUTION
	ROADMAP 6: EDUCATION
	ROADMAP 7: COORDINATION

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SECTION 1: EXECUTIVE SUMMARY

Purpose

Agriculture profoundly impacts the economy, environment, culture, well-being and appeal of the Southern Tier of New York State (NYS) and beyond. The region is blessed to share clean air, ample waters and nutrient-dense soil as a foundation for a strong agricultural economy. Historically, the region has been the backbone and breadbasket of our state and our republic. Today, looming before us, we see the regional potential to be the state and nation's premier food shed. Achieving this requires a truthful look at policies that have devastated rural economies and small family farms over the past decades along with a new dedication to coordination and getting results.

In February 2022, through a grant funded, in part, by the Appalachian Regional Commission (ARC), the Schoharie Economic Enterprise Corporation (SEEC) chose Dr. Lynn Sandra Kahn of LSKAHN Associates, LLC and Rick Osofsky of Ronnybrook Dairy Farm to deliver a business plan and roadmap for Regional, Independent Food Processing. The team added three interviewers with farm and regional backgrounds. The tri-county region under study is Delaware, Otsego and Schoharie Counties, in the Southern Tier of the Eastern Region of New York State (NYS), northwest of New York City (NYC).

The expectation and the measurable outcomes are that the Plan and Roadmaps would lead to more market opportunities, more jobs and more private investment for the tri-county region. The regional benefits include a profitable and sustainable business model that may be replicated across the Appalachian region to create rural agriculture jobs, reverse the loss of farmland, and rebuild local and regional food infrastructure.

Interviews led to the definition of Goal areas and Roadmaps focused on gaps in the food supply chain, some resolved and others made worse by the second year of the COVID crisis. The Roadmaps would have to adapt to the impact of long COVID, the Russian invasion of Ukraine, changing grain yields and persistent climate change. The organizational structure of this Plan for Regional, Independent Food Processing is Goals, Roadmaps, co-chaired Working Groups and clear Performance Measures for the effort overall and each Roadmap.

Key Findings

Four new dynamics directly impacted the final recommendations:

- Rising demand for local and New York State (NYS) agriculture products
- Federal and state policy changes that provide financial incentives to institutions that purchase NYS-grown food products
- Federal and state grants for expanding rural production and processing facilities
- An influx of private, agriculture-related investments in the region.

Investment Opportunities

The interim April 11 Draft Report showed that interviews had revealed clear themes and those results informed a list of investment opportunities, important since the contract deliverable was a business plan and roadmap. At the April 27 remote meeting of the SEEC Farm and Food Advisory Council (FFAC), convened for this project, Dr. Kahn briefly described nine opportunities, then the twelve participating members reviewed and ranked the nine opportunities. About 83% of the votes went to **Opportunity #3: Solve Logistics Problems.**

The Advisory Council result mirrored many of the concerns and ideas voiced by the 100 working farmers, food producers and agriculture-related business owners, directors and stakeholders in our interviews. Comments such as these point to logistics issues:

My county could do more, they could have a campaign to tell people about us.

Why can't we share trucks?

That mill used to be where farmers got together, now it's empty.

I could grow three times as many beans, but the infrastructure isn't there – banking like rural banks used to support farmers, credit for seeds in the spring.

I could grow more if I understood how to transport my products to a larger market and extend the growing season through winter. It's too seasonal, there's not much in the winter.

There's no logistical support for producers who want to expand their customer base. There's no meaningful [state or county] marketing campaign.

Why isn't there a database of every farmer in the state? And maps of every farm store in our region.

Goal of Regional, Independent Food Processing Report

Broadly defined, **Solve Logistics Problems** means identifying and addressing the gaps, roadblocks and logjams in our food supply chain. These logjams may occur anywhere along the food chain, such as when collecting or distributing dairy, meat and produce for local markets such as county schools or larger markets such as New York City (NYC) institutions including schools, hospitals and jails.

To deliver a plan and roadmaps that would boost the regional economy, the focus of this Regional Independent report would be **Solve Logistics Problems**. Action would occur in seven Goal areas, each with its own Roadmap and co-chaired Working Group. The 7 Goals and Roadmaps are: Grow Food, Aggregation, Processing, Storage, Distribution, Education and Coordination.

The overall goal of this Regional, Independent Food Processing Plan and 7 Roadmaps is to identify coordinated actions, 2-year timelines, working group guidelines and measures of success that will lead to more market opportunities for farmers, more jobs and more private investment in the tri-county area. Each Roadmap has quarterly deliverables starting with Planning and Funding. The co-chairs set the performance measures with team input.

Five Core Recommendations

1. Focus on Solving Logistics Problems in a specific Goal area, following the Roadmap timeline with a range of stakeholders in co-chaired Working Groups and teams.
2. Use the “lead agency” model to solve shared problems: access to broadband, the labor shortage, agriculture in schools, marketing campaigns, mapping the network, funding sources and measuring results.
3. Strengthen organizational culture through diverse working groups, more active farmer feedback, and becoming more proactive with farmers and students.
4. Support grass roots advocacy efforts such as 97milk.com.
5. Recommend that the Governor convene a 30-day “tiger team” to adopt a plain language version of VISION 2050 with one and two-year goals added and an emphasis on working teams as a performance network not a hierarchical structure.

SECTION 2: INTRODUCTION

Delaware, Otsego and Schoharie Counties together form an upstate New York agricultural region blessed to share clean air, ample waters and nutrient-dense soil. A variety of agencies and organizations with the mission and intention to support agriculture have offices throughout the region.

The sheer variety of New York State (NYS) agricultural products signals the potential for a significant food shed. From the 2021 State Agriculture Overview published by the U. S. Department of Agriculture, products include: hay, corn, apples, soybeans, cabbage, wheat, sweet corn, squash, beans, maple syrup, pumpkins, oats, barley, flowering plants, cut flowers and bedding plants.⁶

As noted in the NYS Comptroller's August 2022 report, agriculture in New York is remarkably resilient – during the pandemic, the overall state loss in employment was around 8% while agriculture first lost 1% and the following year regained what was lost and more, increasing employment and wages.⁷

Yet even with all these advantages, the region's rural economies have been hit hard with lost farms, lost farmland, and, tragically, lost farmers. This mirrors national trends.

Across America, the overall number of farms of all types has decreased from 20 million in 1950 to 10 million in 1970 to 2.0 million in 2020.⁸ The dairy sector has fared worse. In 1955, America had 2.8 million dairy farms, by 1989 only 205,000 were left and in early 2022, fewer than 30,000 dairy farms survived nationwide.⁹

The same downward trends exist in New York where historically the dairy industry is the state's largest agriculture sector. For 2021, New York State Department of Agriculture and Market reports 33,000 farms in New York State, including 3,600 dairy farms, down from 5,370 dairy farms in 2010. What's missing from the numbers is the pain felt in the close-knit farming community when generational farmers sell out or worse. In 2021, New York lost 200 farms, known and loved families.

In the tri-county region, the most recent USDA data is from 2012 to 2017¹⁰:

- Delaware County lost 2% of its farms, 4% of acres farmed and 2% farm size
- Otsego County lost 12% of its farms, 14% of acres farmed and 3% farm size
- Schoharie County gained 2% in number of farms, gained 1% in acres farmed.

The 2023 USDA report covers 2017 to 2022, providing context for continuing or changing trends. As described below, food habits, farming and distribution changed significantly during the pandemic and continuing to today.

6 https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=NEW%20YORK

7 <https://www.osc.state.ny.us/files/reports/pdf/nys-agricultural-industry-2022.pdf>

8 www.ers.usda.gov

9 www.lancasterfarming.com

10 https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Census_by_State/New_York/

Impact of the Pandemic

The markets for dairy, meat, vegetables and fruit swooned during the early phases of the pandemic as the media blasted pictures of vegetables rotting in fields, fruit rotting on the vine and milk being dumped all the while food banks struggled to meet growing demand.¹¹ The supply chain buckled, lacking adaptability, without enough back-up and months passed before communities adapted. The National Institutes of Health points out the “explosive increase in home meal replacement, meal-kit consumption, on-line ordering, take-out and drive-through.”

People home during the pandemic are still going out less and still cooking for themselves and their families.¹² Consumers want more local food; they seek out farm stores and farm markets.¹³

Food habits have changed slightly. A 2022 National Institutes of Health survey showed increased consumption of fruits, while vegetables showed a slight decrease in consumption.¹⁴ A renewed taste for dairy products has rallied prices since January 2020, though not enough to make up for eight years of low prices, and decades of just barely surviving prices. Milk production in New York was up 1.7 percent, the average price paid to dairy farmers increased from \$18.40 per hundredweight (cwt) in March 2021 to \$25.90 in March 2022 to \$26.40 in September 2022.¹⁵

Some may think farmers have it easy now, without understanding that federal and farm policies have kept milk prices low since the 1980’s when governments called for “bigger is better” and began to subsidize big agriculture, at the expense of our family farms.

A baker and small grocery owner said this, a comment similar to ones made by a food hub director and separately a meat processor:

We definitely had more business in 2020 when the pandemic started and people stayed home, and business stayed very good through 2021. Now in 2022, we are down from 2020-2021, and up from 2019.

The food economy is dynamic, farmers and food stakeholders must constantly learn and adapt while agriculture remains an important contributor to the regional and state economy.

11 <https://www.popsi.com/story/environment/food-rotting-covid-shutdown/>

12 <https://www.supermarketnews.com/consumer-trends/study-most-us-consumers-stick-eating-home-post-pandemic>

13 <https://www.winsightgrocerybusiness.com/retailers/fewer-meals-out-friends-more-dinners-home-dining-2022>

14 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8415868/>

15 https://www.nass.usda.gov/Statistics_by_State/New_York/Publications/Latest_Releases/2022/September2022-Northeast-Monthly-Milk-Production.pdf

SECTION 3: NATURAL RESOURCES IN THE TRI-COUNTY REGION

Delaware, Otsego and Schoharie Counties are blessed to share a part of the natural world rich in clean air, pristine water and nutrient-dense soil. The regional ecology and geology lend themselves to a diversity of landscapes and food products. Humans have been hunting, fishing, farming and building communities here for thousands of years.

Those positive features made this area the “Breadbasket of the American Revolution” and they remain the qualities that offer enormous economic potential for farming today. The region hosts a wide variety of agriculture-related agencies and institutions each with a mission and intention to support farming. Opportunities abound across the three counties, coordination is the key.

About all of the tri-county region is impacted by glacial patterns from eons ago. Hills and valleys, ridge tops and summits, river and lakes, streams and ponds all have glacial roots. The advances and retreats of glaciers shaped and created the geology and soil types and deep-fed waters of the Southern Tier and indeed all of New York State. In the tri-county area, from the Otsego Agriculture and Farmland Protection Plan:

As the glacier moved southward, hilltops were rounded off and valleys were enlarged, deepened, and eventually filled with glacial till material as the ice receded ... Some of the shallower glacial lakes were filled in with decomposing organic material which created peat or muck soils.¹⁶

The quality and expanses of the region’s deep-fed waters nourishes the nutrient-dense soil. As NYS Department of Environmental Conservation notes: NYS has more than 7,600 freshwater lakes, ponds and reservoirs, portions of two Great Lakes, and 70,000 miles of rivers and streams. These waters are first and foremost a source of drinking water for tens of millions of people. The waters support farming, fishing, recreation, tourism, power generation and provide habitats for plants and animal life.¹⁷

While the state’s agricultural economy succeeds from today’s hard work, thousands of years of nature’s activity provides the foundation. We all share a duty protecting the soil and water of the tri-county region.

16 <https://occainfo.org/agriculture-farmland-protection-plan/> p 21

17 <https://www.dec.ny.gov/lands/95817.html>



SECTION 4: ECONOMIC ENVIRONMENT

The overall economic environment for agriculture changed dramatically in 2021 and 2022. During the worst of the COVID pandemic, farmers suffered as much as business owners everywhere. When schools, restaurants, hotels and entertainment venues closed, farmers could not sell their dairy, meat and produce.

Supply chains are still problematic even though alternative school settings, food banks, soup kitchens, food hubs, Community Supported Agriculture (CSA) and other distribution channels overcame logistics and transportation challenges during COVID.

People are still eating at home, more dairy, more fruit, fewer vegetables, and a lot of comfort food. Exciting new business openings and new investments bring some optimism to farmers and food producers looking to expand.

All this is most precarious for dairy farmers. Milk is the only product whose price is fixed by the federal government and rarely does this price cover the Cost of Production, slowly over the decades driving small dairy farmers bankrupt and devastating rural America. The price per hundredweight (cwt) had barely changed in the past eight years, with class 1 milk around \$19.17. That set price is before deductions from the farmer's milk check for trucking, administration fees, inspection fees and so-called "Covid" deductions. The true Cost of Production for dairy farmers is closer to \$23.50 per hundredweight.¹⁸ However, as farmers repeatedly point out, while milk checks have gone up, so have the costs of all inputs including fuel, feed, fertilizer and utilities.

Although some farmers, with some help with better milk prices, will be okay for a while, it's not sure at this point if it's enough improvement to address input cost increases. Fertilizer has more than doubled; our electric bill just went from \$5,000 a month to \$10,000. Demand is not going to make dairy more profitable, I just trust we stop losing money.

A second dynamic dramatically impacting New York farmers is the Russian invasion of Ukraine. Ukraine and Russia are two of the world's largest exporters of wheat, corn, barley and sunflower oil. Russia has banned the export of foods and fertilizers. Russian blockades prevent Ukraine food crops getting to market, and much grain has been stolen by Russian troops. Conditions are ripe for a worldwide food crisis.

Food, fuel and fertilizer prices were already rising due to the pandemic, and floods in our mid-west made planting wheat and other grains problematic. Will there be shortages of grains, corn, wheat?

While these conditions suggest opportunities for NYS farmers, farm policy still pays landowners not to plant food crops. The USDA March 31, 2022 Prospective Planting Report concluded that US farmers will plant more soybeans (up 4% from last year) which require less fertilizer. They will plant less corn (down 4% from last year). While wheat planted for 2022 is about 47.4 million acres, up 1% from 2021, this represents the fifth lowest volume of wheat planted since records began in 1919.

Higher prices for wheat and corn are constrained by higher costs for feed, fuel and fertilizer. Farmers may or may not plant more. Says one farmer:

18 <https://farmdocdaily.illinois.edu/wp-content/uploads/2021/12/fdd171221.pdf>

Animal agriculture is complicated ... we can't just milk more cows. It takes two to three years to respond to a meat or dairy crisis. It will take over a year to address shortages we will face from both COVID and the Russian invasion of Ukraine. It's not like uncapping an oil well after it's been closed down. Agriculture does not respond that way.

Conditions are ripe for worldwide food and hunger crises. Food system expert Christopher Ripple says the potential impact of the war in Ukraine cannot be overstated.¹⁹

Factors that contributed to ... past food price crises are generally present here – high energy prices and poor production in key growing areas, including China, which is anticipating its worst wheat crop in history ... What is more troubling about the current situation, however, is that food and fertilizer prices reached alarming levels even before the invasion of Ukraine, with supply chains still recovering from the pandemic. Against this backdrop, the potential cascade of food system impact from the war in Ukraine is difficult to overstate.

Add to this mix the consequences of big farms getting bigger and small farms disappearing. Concentration gives everyone fewer choices. An August 2022 article by Dan Kaufman asked: *Is It Time to Break Up Big Ag?* Data suggests the answer is yes:

Nationally, the four largest milk dairy co-ops now control more than 50% of the market ... Since 1982, the four largest beef-packing companies went from controlling about 40% of the market to controlling more than 80%. The four largest seed-manufacturers increased their market share from 21% in 1994 to 66% in 2018.²⁰

Kaufman believes the power of agriculture monopolies has devastated farms and farming communities.

Whatever the dynamics of change, the food supply chain is working in some ways and shows signs of strain in other areas. Regional leaders must acknowledge the tensions for farmers operating on thin margins in a hard-driving, competitive marketplace. Extraordinary opportunities as a major food shed will require true listening from all.

19 www.law.virginia.edu

20 <https://www.newyorker.com/news/dispatch/is-it-time-to-break-up-big-ag>

SECTION 5: SUMMARY OF REPORTS, STUDIES AND INTERVIEWS

This section summarizes key points from five specific sources that shaped this report's five core recommendations.

VISION 2050: A PROFITABLE, REGENERATIVE, EQUITABLE, HEALTHY FOOD SYSTEM

On July 28, 2022, The Center for Agriculture Development and Entrepreneurship (CADE) and its research partners released *VISION 2050: A New York State Vision for a Profitable, Regenerative, Equitable, Healthy Food System Future by 2050*. No such vision and strategic plan for New York's food system exists. Over three years, CADE hosted 17 roundtables, over 100 interviews and surveyed over 500 farmers. VISION 2050 is a Food System Vision that reflects the many agencies, systems and communities that impact agriculture policy and our food supply.

The Vision is clear: a profitable, regenerative, equitable and healthy food system. The research teams identified six action areas:

- Consumer values
- Consumer behavior and consumption patterns
- Producer market interactions
- Producer interactions with our environment
- The supply and value chain
- Equity throughout the system

The VISION 2050 report describes the reality of our farm and food system: shrinking farmland, rising climate challenges, growing numbers of retiring farmers, insufficient pipeline of new farmers, barriers to entry for black and Brown aspiring farmers. The Regional, Independent Food Processing interviews would add: lack of access to financial and healthcare resources, insufficient support for indigenous and generational farmers, lack of broadband internet everywhere, tax burdens and cumbersome government paperwork and regulations.

VISION 2050 put forth 22 Recommendations with Ideas for Implementation. The research teams created sector-specific case studies on beef, dry beans and apples; and case studies on, coincidentally, Delaware, Otsego and Schoharie Counties.

VISION 2050 and this Regional, Independent Food Processing plan and 7 Roadmaps have very different approaches. VISION 2050 is academic in method and tone, keeps to a long-term timeframe, relies too much on data from before the pandemic and the Russian invasion of Ukraine, and concludes with a hierarchical organization and "State planned" goals. This Regional Independent plan is network-based, empowers local teams to solve problems with a "Let's start Monday morning" tone and revolves around two-year roadmaps with quarterly milestones. Yet we arrived at the same recommendations and many similar implementation actions.

It seems remarkable that every single VISION 2050 recommendation can be tracked to one of the 7 Roadmaps and Working Groups. VISION 2050 stops with *Ideas for Innovation*, the 7 Roadmaps start with actions stemming from those and other ideas.

VISION 2050 Case Studies: Beef, Dry Beans and Apples²¹

The VISION 2050 document includes three case studies of farm products: beef, beans and apples. Nuggets of brilliance and fine research with valuable results can be found in these case studies. Cornell could increase outreach about research results with plain language handouts at county fairs, Farmer Appreciation Lunches and firehouse BBQs.

Case Study: Beef²²

The case study on beef is comprehensive and up-to-date, beginning with the current status of beef consumption, which has decreased steadily nationwide since the 1970s. Nutritionists, dietitians and the National Institutes of Health are calling for less consumption of beef, leaner cuts, and smaller portions. The Southern Tier and North Country have the most beef operations. New York State has 30 certified processing facilities. Many more “custom exempt” processing facilities serve local families and hunters, especially for deer and elk. The exempt facilities are running at capacity, with most owners uninterested in USDA certification and the paperwork needed to be a USDA inspected facility. The Covid pandemic revealed national and New York difficulties adapting when large facilities close down.

Several points stand out from the interviews with 25 members of the beef industry:

- In rural NYS, families often have a few cattle for their own consumption and informal sales.
- Consumers want lower antibiotic use and more time outside for the animals.
- The NYS beef industry is struggling, in part from insufficient numbers of USDA certified meat processing facilities, which means farmers reserve slots up to a year in advance; many dairy beef and finished Angus beef are sold at auction and processed in Pennsylvania.
- Even though land exists to expand outdoor grazing, finding skilled grazing managers is as difficult as purchasing land, especially for new farmers.
- Beef goes to different markets: livestock directly to restaurants, butcher shops, and other businesses that sell meat under their own label; some livestock to middlemen and specialty meat sellers, many in the livestock or butchering business for generations,
- Entry challenges include: knowing where to find skilled processors, how customers want their animals broken down, and where to access cold storage.
- Whether or not NYS can support a larger beef processing facility is not clear, especially given companion needs for animal holding areas and freezer storage.
- There’s consensus that eating beef has more of an environmental footprint than eating other protein sources, such as beans; grass-based beef systems may be better for the environment than feedlot raised beef. More research is needed.

In the future, they predict consumers will eat less beef, in smaller portions and of higher quality. Many will choose meat substitutes from plant-based grains.

21 <https://www.cadefarms.org/vision-2050> pp 90 -140

22 <https://www.cadefarms.org/vision-2050> pp 91 -99

Case Study: Dry Beans²³

From 1997 to 2017, the number of New York State (NYS) bean farms dropped 77 percent, yet NYS is still the leading producer of dry beans in the northeast region.²⁴ Future growth is expected given that beans are regarded as a nutritious, plant-based protein, and health experts want Americans to consume more plant-based foods.

The dry bean industry began in the 1830s. Although New York is a very small contributor to total US dry bean production (less than 3% by acreage), the state and New York City (NYC) have been active participants. Continuing that leadership means farmers and policymakers adjust to climate change and changing consumption patterns.

Currently, production is dominated by two types of dry beans – red kidney (light and dark red) and black beans, accounting for 90% of all dry beans grown in the State. Darker color beans are better suited for New York’s cool, moist growing conditions. Between 1920 and 2015, NYS red kidney bean production declined along with the national averages. Then NYS lost out to competition from other states amid higher costs and difficult weather conditions.²⁵ VISION 2050 sees the red kidney bean tied to the past, and the future will emphasize black beans, more suited to the New York climate.²⁶

Several other points stand out from interviews and discussion with bean growers, processors, sellers and consumers:

- Expanding production depends on a “visible identity” for New York grown dry beans, a key phrase that describes grower needs across all agriculture products. Where is the statewide marketing campaign that puts greater value a New York products?
- Proximity to East Coast markets, from Boston to Baltimore, and so lower transportation costs is the greatest competitive advantage for NYS producers.
- Dry bean farmers are concentrated in the Finger Lakes region, with easy access to support services such as processors and packers.
- Can soybean producers expand to dry bean production? NY growers want research into the best varieties for NYS weather, as other states do for their farmers.²⁷
- A point made that applies broadly came from a dry bean farmer and processor.

We need more farmers growing beans. They need 1:1 training, to see the books and what goes into it, to show ways to reduce the cost of production and how it measures up, to see demonstrations on how it works. They think you need all this specialized equipment which is not true for direct harvested beans.

The case study concludes there is broad interest in developing a forward vision for the NY dry bean sector in the state and the Northeast to meet growing consumer demand.

23 <https://www.cadefarms.org/vision-2050> p 100-113

24 <https://www.cadefarms.org/vision-2050> p 103

25 <https://www.cadefarms.org/vision-2050> p 102

26 <https://www.cadefarms.org/vision-2050> p 102

27 <https://www.cadefarms.org/vision-2050> p 106

Case Study: Apples²⁸

On average, each American eats about 45 pounds of apples and apple products every year. Bananas and then apples are the two leading fresh fruits eaten in the United States. Over the past 30 years, the consumption of apple juice has declined while fresh whole apple consumption has risen slightly. About 80 percent of the apple juice consumed in the United States is imported.²⁹

New York State (NYS) produces about twice as many apples as New Yorkers consume, allowing the state to export apples up and down the East Coast. This holds even though retailers and food service establishments sell apples from different states, in part because Washington state can produce apples cheaper than New York, and also to reduce the risk of too much supply from any one region.

The number of apples grown in New York State has been stable from 2007 to 2020, though the value of those apples has increased 30 percent. The rise in value comes from farmers increasing production of fresh whole apples at higher prices, and decreasing production of processing apples for apple juice that sell at significantly lower prices.³⁰ There is also a slow and steady increase in apples grow on small plots, less than an acre, which likely are for personal consumption, sales of premium priced organics, U-pick stations or hard cider makers.³¹

Sales of New York state apples in 2020 were \$328 million from 1,383 million pounds of apples.³² Apple producers see economic opportunities in value-added products such as apple cider. Wholesale fresh fruit prices have increased, and 2020 was a good year.

Several points stand out:

- Proximity to the major East Coast markets translates to a transportation cost advantage over Washington state growers.
- Labor costs and labor scarcity are the big challenges.
- Research suggests higher-density, narrow-canopy planting systems are more profitable than traditional orchards.
- Automation for any manual work is becoming more important as a labor shortage hits hard when labor can be 70 percent of any apple farm's operational costs.
- Improvements in apple growing can lead to more profits; many farmers and processors call for research into decisions about variety, root stock and siting.

The apple growers, processors and packers interviewed for the VISION 2050 report believe there are too many apple varieties on the market; maybe too many packers, sales desks and brokers for the number of buyers; and that older packing lines are inefficient.

28 <https://www.cadefarms.org/vision-2050> p 114-123

29 <https://www.cadefarms.org/vision-2050> p114

30 <https://www.cadefarms.org/vision-2050> p 115

31 <https://www.cadefarms.org/vision-2050> p 115

32 <https://www.cadefarms.org/vision-2050> p 116

Case Studies on Counties: Otsego, Delaware, Schoharie³³

The opening of the VISION 2050 section on Counties shows well how different layers and different approaches fit together to support a shared vision and actions for change:

In preparing this Vision, we set out not only to think holistically about the future of New York State agricultural and food system development, but also to consider how the Vision might be further implemented on the ground, at the county level.

Then the section becomes quite problematic. Not the recommendations, as the chart on the next page shows, each of the VISION 2050 twenty two recommendations matches at least one of the 7 Roadmaps.

There are three problems with the narrative in the Case Studies on Counties:

- The Current Conditions section is not current, using, as many regional reports do, the most recent USDA Census of Agriculture County Profiles, 2017. Nothing in here about the COVID impact on our food supply when schools and restaurants closed and people worked from home. No mention of the Russian invasion of Ukraine, which directly effects farmer decisions about planting grains.
- The US Department of Agriculture (USDA) and the land-grant college system, including Cornell as an institution here in New York, have lost the trust of family farmers, in some counties for decades. VISION 2050 somehow did not hear from the angriest farmers, those who have lost their farms, or sold their livestock as a direct result of federal and state policy bias toward “bigger is better,” or lost out on academic funding riddled with conflicts of interest, or dealt with the aftermath of a farmer suicide.
- The 7 Roadmaps reflects a totally different view of governance than VISION 2050. The VISION 2050 statewide plan, of course, wants state control of planning, goals and funding. The 7 Roadmaps calls for a network of diverse, coordinating, grassroots teams that are empowered to solve local problems.

On the other hand, the VISION 2050 twenty two recommendations and many of the “*Ideas for Implementation*” fit perfectly with the 7 Roadmaps and Working Groups. The chart on the next page matches VISION 2050 recommendations with the 7 Working Groups:

33 <https://www.cadefarms.org/vision-2050> p 124-139

VISION 2050 Recommendations

Enhance food system literacy
Create Knowledge Base
Expand farm to school and institutions
New York State's 30% Lunch Initiative
Connect healthy food and human outcomes
Conserve and protect farmland
Support new and generational farmers
Strengthen the food system workforce
Lengthen the Growing Season
Invest in key food sectors
Support affordable health care
Align land preservation and climate goals
Provide technical support on climate goals
Reard climate smart farming
Balance green energy and land preservation
Support wise antibiotic use in livestock
Improve Aggregation and Distribution

Invest in food processing

Improve access to resources, education, capital, land

Regional Independent Roadmaps

Roadmap 6: Education
Roadmap 1: Farmer Support
Roadmap 5: Distribution
Roadmap 1: Farmer Support
Roadmap 6: Education
Roadmap 7 Coordination
Roadmap 1: Farmer Support
Roadmap 7: Coordination
Roadmap 1: Farmer Support
Roadmap 7: Coordination
Roadmap 1: Farmer Support
Roadmap 7: Coordination
Roadmap 6: Education
Roadmap 7: Coordination
Roadmap 7: Coordination
Roadmap 6: Education
Roadmap 2: Aggregation
Roadmap 3: Processing
Roadmap 4: Storage
Roadmap 5: Distribution

Roadmap 1: Farmer Support
Roadmap 3: Processing

Roadmap 1: Farmer Support

AGRICULTURE AND FARMLAND PROTECTION PLANS (AFPPs)

The Delaware, Otsego and Schoharie County Agriculture and Farmland Protection Plans (AFPPs) are comprehensive, clearly written and deeply knowledgeable about each county's specific history, economy, culture and diversity of agriculture products. Each county AFPP viewed agriculture as historically and culturally the backbone of their economies. Even if other industrial sectors have come to the fore, farming and farm-fresh food are major elements in the economic and cultural life of upstate NY.

Common themes surfaced across the three AFPPs. They shared goals of promoting county agriculture products, increasing farm profitability, preserving farmland, supporting farm-friendly policies and strengthening the agriculture infrastructure. These themes also showed up in the SWOT (Strength, Weakness, Opportunity and Threat) analyses done by each county.

Strengths included appreciation for local dairy, meat and produce; growing attraction of farmers markets and farm stores; and relatively low development pressure (as compared to areas like the Hudson Valley).

With some differences in emphasis, the three AFPPs highlighted new and long standing **weaknesses** and challenges for farming: low milk prices; thin farm profits with rising input costs; burdensome taxes and regulations, especially the time and costs of complying with federal and state environmental regulations; the lack of a next generation of farmers; the need for more automation; the regionwide lack of food processing infrastructure; and inadequate marketing of local farm products. The reports cited needs for more farmer representation on county boards and commissions; advanced technical assistance for farmers; more education about local foods for consumers; and more student education about food, farms and agriculture.

Optimism reverberated through discussions of **opportunities**, including new markets in more cities and more ways to help farmers transition to value-added products such as cheesemaking, organic produce and pasture-grazed meat. Every report mentioned agritourism. Note was made of new NYS beverage laws that supported hops and barley crops, along with new rules allowing wine and beer tasting on farms. Each report considered possibilities for local distribution centers and county branding.

The SWOT analyses identified common **threats** to growing the economy, notably the price competition from large-scale, global producers and absence of planning for the next generation of farmers. Financial difficulties of family-owned farms was mentioned consistently, especially the burdens of regulatory compliance. Every report mentioned problems with limited exposure for area youth about careers in agriculture and the lack of agriculture learning opportunities in school.

USDA CENSUS OF AGRICULTURE WITH COUNTY PROFILES

Every five years, the U.S. Department of Agriculture (USDA) issues a report called the Census of Agriculture along with County Profiles. The latest report, from 2017, pointed out that participation of farmers has declined over the years with some results using estimates, a qualification which must be considered in all our discussions: From the USDA National Agriculture Statistics Service here are some facts about our counties.³⁴

In **Delaware County**, the 2017 Census showed 689 farms, down 2% from 2012. Farmed acreage was down 4% to about 144,000 acres. These are small farms: about 69% of Delaware County farms sell less than \$25,000 in agriculture products annually. Other facts for Delaware County: 60% of farms are less than 179 acres. 97% are family-owned, 83% have internet access, and 21% sell directly to consumers. The market value of products sold was \$45.7 million down 4% from 2012. The top crops in acreage are forage (hay), corn, soybeans and vegetables.

In **Otsego County**, the 2017 Census found a total of 880 farms, down 12% from 2012. Farmed acreage was down 14% and the average farm size contracted 3%. These are also small farms. About 72% of Otsego's farms sell less than \$25,000 in agriculture products annually, while 71% are less than 179 acres. The 2017 market value of products sold was \$56 million down 16% from 2012. The top crops in acreage are forage (hay), corn, soybeans and oats. Livestock, poultry and animal products from poultry, cattle, hogs, sheep and goats account for \$36.7 million of sales of which \$28 million is milk from cows. Overall, 99% of Otsego's farms are family owned, 14% sell directly to consumers, and 75% have internet access.

In **Schoharie County**, the number of farms grew 2% from 539 farms in 2012 to 541 farms in 2017. The number of farmed acres also rose slightly, from 98,369 in 2012, to 99,819 acres in 2017. These are small farms: about 60% of Schoharie's farms sell less than \$25,000 in agriculture products annually, while 67% are less than 179 acres. The 2017 market value of agriculture products sold was \$47.9 million, up 21% since 2012. Livestock, poultry, eggs and products from cattle, chicken, goats and sheep account for \$27 million of which \$21 million is milk from cows. Overall, 95% of Schoharie's farms are family owned, 22% sell directly to consumers, and 76% have internet access. The top crops in acreage are forage (hay), corn, vegetables and soybeans.

In 2013, a consultant found fewer active farms in Otsego County than USDA data reported. Gibson worked with municipal governments, farmers and key stakeholders to plot out the location of each farm in Otsego county.³⁵ He found 584 active farms in 2012; USDA reported 995. The difference depends on the definition of "active farm." By overestimating the number of active farms, USDA underestimates the impact of farm policy on the loss of farms, farmland and farmers. The findings suggest a cautious use of this data by local leaders, who might consider a deep dive and further analysis of county numbers.

³⁴ www.nass.usda.gov

³⁵ <https://cms2.revize.com/revize/otsegocountyny/Document%20Center/N-R/Planning/AGRICULTURE%20DISTRICT%20REVIEW/7.FINALAGFARMLANDPROTECTIONPLAN.pdf>

THE VERMONT REPORT ON FOOD DISTRIBUTION STRATEGIES

In April 2022, the State of Vermont and the Northeast Business Innovation Center issued a report, *Strengthening the Regional Value-Added Dairy Distribution System*. Although their focus was value-added dairy such as artisanal cheeses and organic milk, their findings and strategies reinforce our focus on Solving Logistics Problems. The Vermont report opens with this:

“Fluid milk consumption in the United States has declined steadily for years, yet overall dairy consumption has actually grown and is projected to continue to grow largely due to increased consumption of cheese, butter and other value-added dairy products.”

The Vermont report revolves around 5 findings and one strategy for each finding:

Finding 1: The supply chain works well for many buyers and producers, but shows signs of brittleness.

Strategy 1: Build Resiliency takes a holistic view of distribution as “a process that includes producer readiness, marketing and sale strategies, relationships and more.” Producer Readiness means technical training from filling out cost sheets to calculating the break-even point of both wholesale and retail farm sales.

Finding 2: Challenges in attracting and retaining human capital are a huge risk to the vibrancy of distribution networks in the Northeast.

Strategy 2: Grow the Workforce includes a Vermont pipeline of interested and trained people entering food production, processing, aggregation hubs and transportation routing. A labor shortage, such as licensed drivers for refrigerator trucks, has a long-term impact on economic growth.

Finding 3: Existing small-scale freight and distribution specialists play key roles and even reduce distribution friction for producers and buyers.

Strategy: Invest in Existing Distributors Identify and support existing food hubs and distributors. Cultivate a deeper bench.

Finding 4: Marketing and relationship building are critical parts of the distribution process and they need strengthening.

Strategy: Market as a Region. Made in Vermont is a trusted brand.

Finding 5: Distribution readiness involves significant administrative, regulatory and technical capabilities with which many producers struggle.

Strategy: Support Distribution Readiness and do this for all stages of the business lifecycle.

The Vermont report provided a helpful glossary of terms such as distribution, freight, upstream, downstream, cross-docking and order consolidation. Their conclusion is hopeful for upstate New York as well: “the market demand for value-added products continues to grow.” Our tri-county Plan and Roadmaps borrow from the five Vermont Strategies for Regional Distribution.

SUMMARY OF INTERVIEWS

Our consultant team interviewed about 100 people. Four of the five members of the consultant team are long-time, regional farmers who had the advantage of instant trust and credibility. Towards the end of the interviewing period, small groups of farmers, consumers and others would spontaneously approach our team to raise issues and demand urgency. Our team review shows we interviewed these people:

16 members and referrals of the Food and Farm Advisory Committee

21 dairy farmers

12 meat processors

4 ag business owners

2 owners of dairy processing plants

2 crop farmers

3 hay farmers

1 cattle and beef farmer

1 farm and food co-op director

1 farm store owner

2 restaurant owners

1 food distribution expert

3 farm and food investors

1 farm bureau member

1 agritourism expert

2 county Agriculture Board members

3 local assemblymen

1 state senator

4 “whole milk in school” activists

11 Amish dairy farmers

8 consumers

Quotes from the Interviews

The quotes below are from the 100 plus interviews. Most farmers asked not to be identified, so in this section, no one is identified. The comments were divided into two groups, basically farmers and then everyone else. The quotes from the agency officials, economic development and marketing specialists, non-profit managers, academic researchers and professors did seem more strategic so they are presented first. The comments from the farmers, food producers and food distributors reflect the reality of New York farming. A little grouping brought related comments together.

Agency Officials, Economic and Marketing Specialists, Non-Profits and Academics

The key question is how to transition agriculture businesses to value-added products, so there's more money for the farmer.

The larger system, scaling up to go into the New York City (NYC) market, requires a middle entity. Could be some kind of Community Supported Agriculture (CSA). There is not one model, there's multiple models. Our farmers grow great products. Maybe we need a regional CSA. Another model is multiple CSAs joining together more efficiently to serve a larger market, the wholesale model. For several years, Richard Giles ran Lucky Dog Farm. He had a niche, he was a farmer's representative. He delivered from different farms to NYC and built individual relationships. That model is the small-scale wholesaler getting our vegetables and produce, some greens and fruit to market.

For the majority of producers, we need a regional wholesaler, cooperative, or some institutional structure that approximates the role of a wholesaler. That infrastructure does not exist.

The only way to be a real food shed is to have strong hubs and aggregate across small farms. What does it look like? Lots of small processing, aggregation, storing, refrigerating facilities. Becoming America's bread basket again. It's a call to action

There's no reliable way to get food from individual farms to markets.

Farmers need to understand the demand parameters, they have to meet the interests of major or large scale buyers. We can meet the demand for small grocers, restaurants and farmers markets. The biggest barrier for the food system is the inability to consistently meet the demand parameters of the markets interested in our food products on a meaningful scale, how to clean carrots, cut them and pack them.

There are huge opportunities for vegetable growers. First, bringing together vegetables from different farms for summer markets, and now inside winter markets for fresh produce and farm products. More food hubs are driving truckloads of produce and dairy products to New York City. There's more demand.

The biggest economic opportunity is bringing together vegetable farmers for bigger markets. Going from just a summer farmers market to winter markets and indoor markets. There's lots of creative development with greenhouses, that are carbon neutral, open in the winter.

We have to look at agriculture in the context of a larger system. Dairy farmers are losing ground, solar is taking out farmland. Economies of scale matter. Walmart survives, while Main Street dies.

There are opportunities. There are markets in New York City, small trucks bringing [upstate] mushrooms and blueberries, direct to buyers and consumers. We need to aggregate across farms and meet buyers directly to be cost-effective.

Counties need to be serious about keeping farmland in production, make real decisions about protecting farmland and forestland.

The warehouses in New York City that receive food want to buy truckloads, 10 to 15,000 boxes at \$12 a box, it's big business.

There are unlimited opportunities for shelf-stable milk production, and opportunities for cold storage.

There seems to be an increase in raw milk products, raw milk, going to the creameries to make cheese.

I met investors who want sheep milk ice cream and yogurt, it's got more protein.

There's a lot of money out there now, from a lot of agencies. It's a matter of aligning the right project and funding sources.

Over \$1 billion in funds from the USDA is being released in 2022-2023. \$150 million for meat processing, \$150 million for the food systems. USDA wants more processing.

Farmers are resistant to doing anything different. We do not have adequate USDA meat processing. It's 50% we don't have adequate processing and 50% farmers all slaughter animals in the spring, all at once, and we do not have processing capacity for that.

SUNY Cobleskill has an incubator where new businesses can design, develop and test new products.

COVID is still a barrier. From the agency view, there was job loss, some people were not in attendance. The whole agricultural workforce was worsened by COVID. There are not enough people working in farming, retail, restaurants, the whole supply chain, transportation, even offloading trucks. There's been an exodus out of the state. Baby boomers are retiring, leaving Gen X nearing retirement and they're saying "I don't need to work through COVID, I'm out." We are losing experience. It's a sad loss you can't fill with bodies or money. There are agency battles over bodies to fill positions. We are paying more money and still see planners leaving government.

The whole food supply chain was affected by COVID. You can't move enough, far enough, fast enough. We don't have the drivers.

Broadband is a problem. Families and farms can wait nine months for fiber and if you're doing this through a grant, you have to order fiber network at the same time as you apply for funding.

We need apprenticeships, we need to train the next generation.

The challenge is moving to clean energy, getting off fossil fuels. The county is investing in wind and solar, but it's not clear, who puts it in, who maintains it, there's no money for maintenance and new regulations.

Agriculture and forestry are the only sectors that can pull carbon out of the environment.

Active and Recent Farmers, Food Producers and Distributors

My whole life, depends on the environment, my calves, the health of my calves. I'm proud to be a farmer. I love farming.

The American farmer is iconic, honest, good, rugged, toils all day, people respect us.

We were down on all fours 10,000 years ago and we started eating meat and dairy, domesticating cows, the gentle giant, who does all of this for us, takes nutritionally neutral grass in the front yard and tomorrow morning I have a glass of milk with protein, nutrients and fat.

Farmers are a community. One radio show, Bill Rogers, American Farmer, gets 40 million listeners.

Beef is being imported into the United States, driving the price down for our US producers. We need local feed lots here, closer by, not just out west, or the south. We need more local processing, USDA facilities. We need more representation from our assemblymen and congressmen and senators, and to be better represented by our Secretary of Agriculture.

Local politicians do not represent farmers. They are not lobbying for fair farmgate prices. The processors are making money, not the beef farmers. It was the same in our dairy business. For my 50 cow-calf pairs, it costs too much to raise them with the rising cost of grain – hay – fuel and land taxes.

Local businesses can buy their meat products cheaper from the big chain units, not allowing our local farmers to be competitive.

Beef producers cannot make their cost of production. The younger generation is not coming in. Raising prime beef is the only way to make cost of production, from chefs, butchers, high-end groceries.

Every county needs a processing plant, local, not 400 miles away. It takes a lot of time and a lot of money to get USDA certified. Some farms hire consultants to do USDA paperwork. Then there's the paperwork and expense of being USDA inspected.

There's not enough USDA certified meat processing facilities in New York. So beef producers make appointments 6 to 8 months ahead of time for an animal to be butchered and processed. Many of them go to Pennsylvania for meat processing.

As a farmer, I'd love to be more independent, but I don't see a light at the end of the tunnel. I want more local food in our county, in our backyard, but how do we switch markets? Consumers won't pay a higher price for local products.

We are consumers for the farm. Fertilizer doubled, from \$400 a ton to \$800-\$900 a ton.

I'm just breaking even, with hay sales to local horse people, dairy farmers, beef farmers.

Costs of producing the hay is rising dramatically. Twine has risen. Plastic wrap is gone from \$80 to \$120. They're not as many customers to sell to, our larger farms are taking control of a lot of the small farms and their land.

The number one issue is the price of milk. We're used to 15, 16, \$18-\$19 per hundred weight (cwt). It just hit \$21.50 cwt. but everything else is going up. USDA programs to help farmers don't cover cost when the price of milk is low and the price of food is high.

Big issue is finding help and paying for help. Kids don't want to unload hay.

Fifteen years ago, we grew beans, red beans, and black beans, now you can't find producers. You can't make the cost of production. And everyone tells kids not to go on to farming. So who will grow our food? I know New York farmers who moved to West Virginia, it's cheaper and they can farm.

And everyone needs to understand what we bring in to Beechnut on a Wednesday is one year's worth of work with that crop.

At 20-25 years old you don't accept or realize the sacrifice needed to be a farmer. You have to be willing to go without a shiny new tractor and days off. You have to give up something, and the spouse has to be willing to sacrifice, especially days off and disposable income.

Farmers have more power than they think.

Farming is a business, it's not just farming, it's a business, money in, money out. You have to know the marketplace, understand the cycles, cut a path separate from everyone else. You have to strive for excellence, look at ways to achieve. Search out, I searched out people smarter than me, trying to apply what they're doing back at my farm. You have to be the person seeking knowledge, go to farmers you respect if you want to learn, pick their brains. Each farm is its own individual business. What's right for one might not be right for another one. And don't invest so much it takes you down.

As a producer, we get squeezed from both sides, people want to pay low to buy. For our products, costs are rising. A big part of the solution is marketing, money, logistics, labor

There's no navigator for the maze of agriculture agencies each with their own bureaucracy, for grants or certification or inspections, it's especially difficult in New York State.

The land grant colleges have lost their way, they can get all the money they need through government grants and huge industrial agriculture. The farmer has no voice. We see that when our tax dollars go to lab-created foods. We saw that with Monsanto. Land grant colleges should be devoted to agriculture, they should be the beacon farmers look to for guidance and support. Instead, farming is being destroyed and they don't help.

Do not look to government to save your ass. They have good intentions but things get lost. Each county is different.

Small farms are being driven out of business. Do we only want 3 or 4 farms in this country? Is it inevitable? Will there be no more animal agriculture? Will all our food be made in factories so we can feed the world? Where does it lead to? Who are we?

There's nothing wrong with sustainable agriculture, there's nothing wrong with an 80-cow farm. Grazing animals restore the soil, capture carbon, renew our ability to grow and raise our food.

SECTION 6: THREE NEW MARKET TRENDS

The market trends that matter are the ones consumers and investors support. By the end of July 2022, our consulting team had interviewed over 100 people, including dairy, meat and crop farmers, food business owners, civic, political and educational leaders.

Listening especially to farmers, producers, grocery and farm store owners, one theme emerged repeatedly: ***Just do it! Build a regional food system. Coordinate distribution. Have a marketing campaign.***

These factors suggest a promising financial environment for investments in agriculture:

1. Demand is growing. As one small food co-op manager put it:

Since COVID, everyone wants local milk, local meats, both local residents and people who visit from New York City. They want meat and milk in their back yards. They know local milk is healthier because it's not shipped as far. What's bottled today and we drink tomorrow has better taste and better quality. We see every day high demand, a high market for local milk, local meat, local veggies - right here in our store's refrigerators.

From another farmer:

Another impact of COVID is the recognition that we need our small farmers and we need more local producers, more local processors and regional distributors. We all saw disrupted food chains. We saw empty shelves and dumped milk. We need strong supply chains in our local communities and for the cities near us. COVID made people take a look and decide they want to keep farms in backyards and not move food so far.

2. Policy now favors agriculture in rural areas:

In 2021 and continuing, New York State (NYS) changed statewide food system policies so that state-funded institutions serving food must buy 20% of that food from New York State farmers, growers and producers. New York State will also pay up to an extra \$.25 for every school lunch served with 30% or more NYS grown food. On the federal level, USDA is aiming \$4 billion of grants and investments to strengthen critical supply chains, having discovered during the pandemic the lack of flexibility in processing capacity across the country, particularly in the meat industry.³⁶

For farmers, this means making decisions about markets beyond farmstands and local farmers markets. The decision is to produce more and sell to a larger destination -- the wholesale market. Wholesale means a lower price per item yet selling far more products than the personal network of markets. The calculus is complicated.

3. Follow the Money

Private investors are all over the tri-county region buying land, looking for unique food sources, expanding processing capacity, even planting chestnut and hazelnut trees.

36 <https://www.usda.gov/media/press-releases/2021/06/08/usda-invest-more-4-billion-strengthen-food-system>



SECTION 7: NINE OPPORTUNITIES FOR INVESTMENT

As summarized in the Draft Report delivered to SEEC on April 11, 2022, the consultant team briefly identified nine opportunities for investment and economic development:

1. Support Rising Demand and Larger Businesses

- Lots of investors in the area, announcements soon
- Key issues are labor, broadband and distribution

2. Help Farmers Expand Production

- One-Stop Center – in person and online -- for farm grants and loans to expand or transition; more information about aggregating to reach city markets; more information about dairy, meat and crop requirements (weight, shape, packaging) for large city and institutional markets

3. Solve Logistics Problems (dairy, meat, fruits, vegetable and other products)

- Scale, Aggregation, Distribution
- Storing, cold storage

4. Launch Combined Marketing Campaign

- Create Regional Brand
- What identity? Unique story, inclusive: Amish, St. Regis Mohawk and other tribes
- Message: Eat and Drink What's Real

5. Launch Combined Agritourism Campaign

- Advertise

6. Launch new products

- Ice Cream – increased market demand
- Dairy – drinkables, kefir, coffee and maple drinks, shelf-stable milk
- Crop – chestnut and hazelnut trees; urgent: wheat and grain crops
- Sheep – demand for sheep milk ice cream and yogurt

7. Sponsor USDA Certified Meat Processing Facility

- None enough across NYS, farmers bring cows to Pennsylvania

8. Take on Education Challenges

- Reach out to farmers with education opportunities, apprenticeship programs; have a booth at the County Fairs, be proactive, show how to do online searches for grants and how to Zoom for training
- Educate young people about careers in agriculture; launch apprenticeship programs pairing young and retiring farmers
- Educate the public about healthy eating choices

9. Take a Stand

- Support whole milk in schools
- Support new milk pricing system
- Consider other policy issues such as taxes or Country of Origin labelling

SECTION 8: ONE KEY INVESTMENT: SOLVE LOGISTICS PROBLEMS

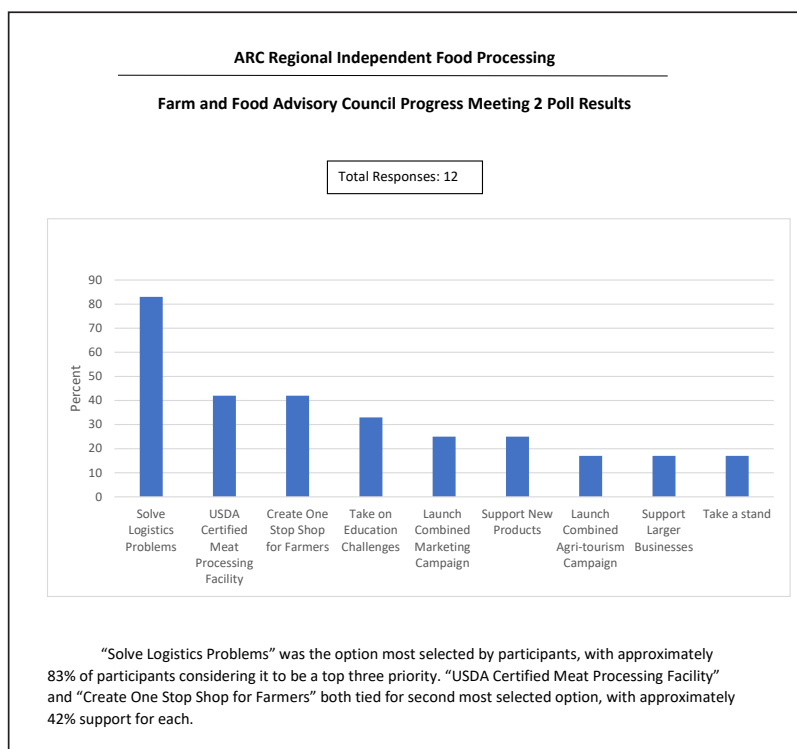
The nine opportunities had been sketched out in an April 11 draft report. At an April 27 virtual meeting of the Farm and Food Advisory Committee, participants ranked the nine opportunities. The clear results showed about 83% believed **Opportunity #3: Solve Logistics Problems** was most important.

Essentially, they agreed that for the region's farmers and producers to be successful, we must strengthen and build out the infrastructure of the food supply chain – the capacity for aggregation, packing, storage, transportation and coordination.

Aggregation, storage and transportation work together. For farmers to drop off produce and excess products at aggregation points, or schedule pick up by food hub or distributor, and then for truckers to pull crates, boxes and pallets together as a tractor load and drive to New York City requires coordination among farmers, buyers, distributors and more. Distribution facilities, like the new \$39 million New York Regional Food Hub in the Hunts Point part of the Bronx, need areas for docking, unloading and cross docking so different pallets go on different trucks to specific destinations or left over pallets go into cold storage

We hear creative ideas about new coffee and maple drinks. We see market demand for more artisanal cheese, for vegetables and fruits in the winter season, more shelf-stable milk, for new crops such as chestnut and hazelnut trees, and amid all this are war-related, urgent needs to plant more wheat, corn and grain. Logistics are the barrier.

Opportunity abounds if local governments adopt a regional approach to shared issues such as the labor shortage, inadequate broadband, and ways we educate our young people about careers in agriculture or pair new farmers with experienced and retiring farmers.



Logistics issues impact every element of the food supply chain. A true regional approach takes a systems view and learns to work across counties, agencies, diverse groups of stakeholders and always listening closest to the voice of the farmer.

Case Study: Ronnybrook Dairy Farm Expands Again

The third generation of the Osofsky family now manages Ronnybrook Dairy Farm,³⁷ in New York's Hudson Valley. Beginning in the 1940's, the Osofsky family raised prized Holstein cows for their glass-bottled milk and other products including Creamline™ milk, yogurt, drinkable yogurt, butter and crème fraîche. The New York Times described their products as the “Dom Perignon” of dairy.

By 2018, Ronnybrook would completely sell out of fluid milk products every week both to major New York City (NYC) farmers' markets and to groceries such as some branches of Whole Foods. They believed they could double production and still sell out every week. They had reached maximum on-farm capacity to manufacture more dairy products and began looking for locations to build a satellite, milk-processing facility.

In early 2020, Ronnybrook looked in Schoharie County at physical, industrial and manufacturing sites. Soon after, investors interested in helping family farmers found Ronnybrook – a capacity-limited, high-quality, in-demand dairy producer who sells out fluid milk every week. In 2021 and 2022, these private investors gave a cash infusion to help Ronnybrook purchase equipment that they would install at West Meadow Creamery in Montgomery County, New York. They needed a new bottling machine and a new labeling machine, each costing tens of thousands of dollars, and new pipelines and new coolers. The arrangement is called co-packing, Ronnybrook leases space from West Meadow, a new and underutilized cheesemaking and distribution facility.

In mid-2022, Ronnybrook started testing the logistics system: bottling equipment, packing, labeling, storing. They already had the licensing and certifications done. Then they brought in the milk trucks. In December 2022, Ronnybrook began selling butter made from Schoharie County Amish milk.

The lessons for farmers who want to expand and are looking for investors:

- Focus first on making the best product possible and selling out weekly. Investors will find you.
- Be very clear about what you need – equipment, staffing, seeds, new facility?
- Values matter. CrannMor Advisors attention to balancing the productivity of sustainable agriculture with business success is a worthy goal, especially for grassroots food and farming projects.

Ronnybrook's goal is to increase profits at least 10% over two years and hire an extra shift of 17 workers the first year. Regional, Independent Food Processing adopted this metric as a core measure of success. This report sets the challenge of Ten Percent Economic Growth as a goal and metric for all teams that work through the 7 Roadmaps, at every level – farm, store, groups of farmers, farm markets, towns, counties, tribes and region.

37 www.ronnybrook.com

SECTION 9: THE BUSINESS CASE FOR SOLVING LOGISTICS PROBLEMS

The consultants were hired to deliver a business plan and roadmap that was as specific as possible, that would lead to more market opportunities, more jobs and more private investment for the tri-county region. Regional benefits would include a profitable and sustainable business model that may be replicated throughout the Appalachian region and upstate New York to create more rural agriculture jobs, reverse the loss of farmland, and rebuild critical local and regional food infrastructure.

Three data points lend themselves to the proposal that Solving Logistics Problems and moving together along the 7 Roadmaps would provide a 10% boost to the economies of towns, farms, counties and tribes.

Data Point 1: The Economic Multiplier Effect

Each of the three counties Agriculture and Farmland Protection Plan (AFPP) cited evidence that agriculture generates an “economic multiplier effect” since farmers use income to purchase supplies and services from local businesses. A 2001 Cornell study concluded that agriculture, forestry and fisheries services and generate a 1.44 multiplier, interpreted as one new job in the overall economy for every two created in agriculture, or every dollar of agriculture output brings an additional \$.44 in income for other local businesses.³⁸

Data Point 2: Agriculture Proves Good Return on Investment

Agriculture benefits county budgets while housing developments or solar farms cost communities and lower budget flexibilities. Farms save counties tax dollars. The Otsego County AFPP cited research from the American Farmland Trust:

The findings of 15 studies in New York showed that agriculture and open space cost towns only \$.29 for every \$1.00 paid in taxes (a net benefit), while residential space costs towns \$1.27 for every \$1.00 paid in taxes (a net loss)... Farms reduce demand for public services and associated property taxes. Farm and forest lands have a net tax profit, because they pay little in taxes while demanding far less in costly municipal services.³⁹

Data Point 3: Ten Percent Economic Growth

Ronnybrook Dairy Farm plans to dramatically expand production, co-pack at a new creamery in Montgomery County, and buy milk from Schoharie County dairy farmers. They estimate a 10% increase in income by the end of two years. The Case Study on Ronnybrook reflects this confidence going forward.

38 <http://www.shepstone.net/NYdeer.pdf>

39 <https://farmlandinfo.org/publications/cultivate-new-york/>

Expand Your Farm Business

Myron Thurston III, MBA and Food Supply Chain marketing Specialist, Cornell Cooperative Extension, created a workshop for farmers thinking about expanding their plantings to reach a larger market. Thurston's workshop defines retail and wholesale, the Cost of Production and how to do a break-even cost analysis to decide whether to grow more crops or raise more animals.

Selling Retail: The farmer creates goods and sells directly to consumers at farmers markets, and to restaurants, grocers, food banks and schools. For selling retail, a very individual effort, the farmer pays for everything -- transportation, packing, storing, distribution and management of sales including price sheets. Sales costs include membership in farmers markets, the farm stand itself, bags, baskets, signage and costs associated with unsold products. Farmers make about \$11.6 of every \$1.00 that consumers spend on food.

Selling Wholesale: The farmer creates goods and sells to an intermediate buyer, often called a wholesaler or distributor. Selling wholesale means lower costs and lower costs per item. Farmers make up for lower margins by producing more. The farmer sells more at a lower price and does not pay for packing, storing and distribution. The farmer grows the food or raises the animal and then sends it off to the next step in the supply chain. Everything raised or grown goes to the wholesaler.

Deciding whether to include the wholesale market for your product means very clearly understanding your cost of production and your break-even point.

Cost of Production: The cost of production includes direct costs such as seed, fertilizer, mulch, other raw materials, labor, farm supplies, gasoline for transportation and overhead such as electricity. Indirect costs include taxes and insurance.

Break-Even Cost Analysis:

Selling wholesale means identifying your break-even point and then deciding if your farm can achieve economies of scale by producing more units of a product. Start identifying your break-even point by determining your cost of production for a specific quantity of product, such as 800 tomatoes or 50 bushels of corn or 100 pounds of milk.

Then identify the change in costs and profits if you sell one hundred more units of your product. Farmers can sell both retail and wholesale and the break-even points will be different. If you sell at a farmer's market or a distributor takes all your products, your costs and profits will be different. Even if the farmer sells retail and captures more of the food dollar for each product, the costs are also higher. When selling wholesale, the farmer grows or raises their product without the need to find a market beyond their wholesale partner.

It's Hard to Get into Manhattan

In a May 2022 remote meeting, Dr. Scott Ferguson of the Institute for Rural Vitality, at SUNY Cobleskill, and Seth Browe, now Senior Sales representative for Energy Efficiency Programming, answered the interview questions about problems and opportunities by saying the keys to expanding rural economies are: Scale, Aggregation and Distribution. Scale would answer the questions: what are the markets, what are the price points, who arranges transportation to institutional customers? Aggregation means bringing products together for transportation in large trucks. Distribution includes solving the problems of routing, finding drivers, and arranging for cold storage.

From the farmer's point of view, pretty much everyone could grow more or raise more or produce more if they trusted there was a market for their products, they could get to that market and they could sell for more than the cost of production.

For many of the farmers and food producers interviewed for this report, expansion means the markets and opportunities in New York City. Getting to Manhattan, scaling up, means some entity that aggregates across farms to deliver to central warehouses with drivers going the last mile to schools, groceries, markets or restaurants. The ultimate network would link several Community Supported Agriculture aggregation and distribution efforts. Different models would co-exist. Regional CSAs would work as needed with small-scale wholesalers.

The earlier quote rings true:

The only way to be a real food shed is to have strong hubs and aggregate across small farms. What does it look like? Lots of small processing, aggregation, storing, refrigerating facilities. Becoming America's bread basket again. It's a call to action.

Moving Forward

Opportunity exists for every county and village in the Southern Tier and beyond to assess the costs and benefits of local investments in fixing a gap in the food supply chain. Presenting a case for investment includes describing the agriculture "economic multiplier effect" and the research cited earlier showing new housing developments cost local governments taxpayer dollars, while agriculture investments benefit towns and counties as a net plus to the bottom line.

Local government can help the farming community achieve greater economies of scale by investments in local aggregating, processing, storage and distribution facilities. This may include renovating existing or abandoned buildings and industrial sites. Local governments can invest in the food supply chain.

Case Study: Catskills Agrarian Alliance as Proof of Concept⁴⁰

For ten years, a network of farmers in Delaware, Otsego and Schoharie Counties has been building an alternative food production, aggregation and distribution system with an expansive reach. Formerly the Lucky Dog Food Hub, and then 607 CSA, the Catskills Agrarian Alliance (CAA), now a not-for-profit, collects food and other products from more than 40 small-scale, sustainable family farms and delivers fresh, healthy food to upstate schools, food banks and other food providers. CAA also trucks products to a central NYC location which then organizes last-mile delivery to food insecure neighborhoods.

Catskills Agrarian Alliance's (CAA) work aggregating and delivering food is a type of Community Supported Agriculture (CSA). In this role, and every week, CAA distributes produce directly to 700 households in the Catskills region and New York City, adding up to 4 tons of fresh, nutritious, local produce, dairy, eggs, meat, baked goods, greens and legumes. They work directly with 22 mutual aid organization, serving hundreds of families weekly.

CAA works with 27 K-12 schools in the tri-county area, distributing over 30,000 pounds of local food during the 2022–23 school year, feeding a total of 42,000 students. As part of their land access and social justice values, CAA works to eliminate barriers for access to farmland for LGBTQ people, Native Americans, and all people of color.

CAA leases and operates Star Route Farm, a 15 acre regenerative, vegetable and grain operation that produced more than 17,000 pounds of nutrient-dense, fresh produce, all donated to mutual aid organizations, while providing training for the next generation of farmers.

Lessons from Tianna Kennedy, Executive Director, Catskills Agrarian Alliance:

- It's all about relationships — with farmers, drivers, truckers, chefs, bakers, grocers, restaurants, vendors and farmers markets.
- Take the point of view, it's a massive logistics network.
- With all the input costs going up – fuel, labor – and farmers operating on razor thin margins, profits are precarious for many.
- Grants and loans will usually fund buildings, equipment, and transportation; they don't usually fund management. We have to be sustainable and profitable.
- CAA started as grass-roots farmers sharing trucks to bring food to NYC markets and kept growing organically. With the pandemic, CAA went from 20 to 40 farms almost overnight, added more community organizations and months of delivery.
- Governments must fix the funding process and how long farmers wait to get paid.

CAA is a complex, grassroots, self-organizing, logistics network that delivers results. The Catskills Agrarian Alliance is the proof of concept for the dispersed network structure of Regional, Independent Food Processing. It can be done!

40 <https://www.catskillsagrarianalliance.org/>

SECTION 10: BUDGETS AND FINANCIAL PROJECTIONS

The overall Plan and the roadmaps do have associated costs. This section briefly comments on costs and benefits for the overall plan and the 7 Roadmaps: Grow Food, Aggregation, Processing, Storage, Distribution, Education and Coordination.

Overall, a 10% economic boost for each county at the end of year two is predicted.

All 7 Roadmaps have the same need for one Project Manager: a central coordinator and food market specialist. Estimated salary and benefits are:

- Project Manager: \$150,000
- Office space: \$100,000
- Database Development and Management (data including commodity prices, weather conditions, food hub requests): \$100,000

Regionally, salaried marketing experts are already doing this work of matching farmers and markets. Staff from Cornell Cooperative Extension (CCE), new positions such as the Schoharie County Agriculture Marketing Specialist, and consulting staff in other organizations such as CADE help develop farmers' relationships with buyers and new markets.

Below are some specific cost and funding notes for each of the Roadmaps. Funding needs seem to fall into three categories: Management, Facilities and Programming. As a regional effort with multiple partners, the Regional, Independent Food Processing Plan and Roadmaps has an appeal for certain government funding.

Goal 1: Grow Food

A network of farmers and producers has existed in the region for hundreds if not thousands of years. This report calls for community and political leaders to work together and proactively support local farmers through the 7 Roadmaps.

Goal 2: Aggregation

A network of food hubs and distributors provides energy that moves the food supply chain along, adapting easily or with great difficulty to ever changing conditions. The hubs are the nodes for regional, independent food processing.

Goal 3: Processing

We agree with the CADE report that a missing link in the food supply chain are many, small food processing facilities. The full range of funding needs is present from a few thousand to many millions of dollars. So is an enormous USDA investment plan worth hundreds of millions of dollars for investments in rural America.

Goal 4: Storage

The lack of heated, cold and frozen food storage will become more obvious as the regional food economy grows. Like the conversations regarding abandoned factories and processing needs, towns will have to consider what makes the most sense given the local labor pool, potential storage sites and access to funding. Estimates range from \$50,000 to \$250,000 per facility. Lots of towns in farming areas already have existing or abandoned storage facilities and could leverage existing buildings for unmet needs.

Goal 5: Distribution

Relationships are building between farmers, aggregators and distributors. At the moment, consultants of all sorts have connections to a good number of food hubs and small distributors. When they decide to expand, government grants and public-private partnerships are available.

Goal 6: Education

The three county AFPPs looked at education in four ways: (1) Information Centers for Farmers, (2) Student Outreach and Internships, (3) Consumer Education and (4) Regional Marketing Campaign. This Plan calls for one Education Working Group for these four activities:

Action 6: Create County-based Information Centers for Farmers:

Our farmers need easy access to current price information in the retail and wholesale markets, to technical training, and to grant opportunities and training courses on specific topics such “cost-benefits” or “producer readiness.” Each center would have access to the shared database of funding sources, current market data for specific products and training modules. Estimated cost is \$350,000 for database development and up to \$100,000 per facility. Montgomery County NY built one for \$30,000. Most of the information exists, uncoordinated.

Action 7: Student Outreach and Internships

There are great teachers in this region connecting high school students with jobs in farming, forestry, ranching and environmental practices. CCE could convene teachers to share best practices. Student outreach might stop the brain drain, excite young people about jobs in food hubs and farming

Action 8: Consumer Education

Many county reports reference a need to design and produce a multi-media information campaign. Small, tentative conversation have begun. Private investors are also currently meeting to design such a campaign. The motivation is powerful: there is no counter-narrative to the billions of dollars going into the lab-grown food message.

Action 9: Launch Regional Marketing Programming to highlight products and sponsor events that match buyers with our producers, similar to how Wisconsin markets its producers.

Goal 7: Coordination

Action 10: Establish Central Base of Operations with a Project Manager

Especially for funding proposals, database development and solving shared problems, the regional effort needs a central point of coordination.

SECTION 11: GOALS, ROADMAPS AND WORKING GROUPS

This plan and the 7 Roadmaps have one purpose: to strengthen all aspects of Regional, Independent Food Processing. In turn, the food supply chain will be stronger, more effective, serve more people and improve the regional economy.

The key strategy is Solve Logistics Problems that disrupt the food supply chain by working in teams on a few priority actions. As with any approach to solving a complex problem, this report breaks the larger topic of logistics into workable chunks, here called Goal areas. There is an overall structure to this approach: Goals, Roadmaps, co-chaired Working Groups, and Performance Measures.

The expectations and measurable outcomes for this Plan and 7 Roadmaps are increased markets, more jobs, more private investments in the region, reversing the loss of farmland, and rebuilding the food infrastructure. Overall:

- Each Goal has its own 2-year Roadmap of priorities.
- Each Goal has a Working Group for guidance and support.
- Each Working Group is co-chaired.
- Teams and funding are managed by the co-chaired Working Groups.
- Stakeholders actively participate in discussions and decisions.
- Each Roadmap tracks groups of priority actions, called Solution Sets.
- Measures of success are very clear and reported on weekly or monthly.

Identifying the seven Goal areas unfolded in the early stages of this investigation. The consulting team interviewed over 100 farmers and food providers, members of the Farm and Food Advisory Council, and other farming stakeholders. All interviews were made up 3 questions:

- What are the barriers to a stronger farm economy?
- What are the opportunities?
- What else do you want us to know?

The interviews directly led to the definitions of the report's Goals, 7 Roadmaps, co-chaired Working Groups and set of performance measures.

CASE STUDY: THE CUSTOM MEAT CUTTER

This example shows the lack of shared priorities across NYS levels of government:

The husband started butchering when he was 14 and before that worked in groceries, meat markets and sometimes would process poultry for customers. He had been in the business for 12 years. In 2020, he and his wife started a small custom-cutting meat processing business. They were swamped right away. In 2021, according to the owners: *It's backed down a little since last year, but it's steady.*

They decided they wanted to expand and become USDA certified. They filled out forms, got a \$100,000 line of credit from the bank, and in May of 2022 tried to get through the USDA on-line application for a grant to buy equipment and start building. They could not even get through the registration process, and they had more than a few people trying to figure it out.

Fortunately, their county recognized that the pandemic revealed the shortfall in food processing and had grants for food processing including meat processing. They got \$60,000 total from the county, originally part of USDA pandemic grants to counties. They bought a new, refrigerated tractor-trailer that meant more mobile services. Their plan is to build a new facility to process 20 beef and 20 hogs a week. Currently set up in old dairy, they are looking to buy land. It is now a \$600,000 project.

The lessons are:

- Have a quality product and demonstrate you are at capacity, meeting demand
- Have a clear plan and budget, know what you need to expand
- Be persistent, look at multiple sources

SECTION 12: FINAL RECOMMENDATIONS

This report proposes seven Goal areas, each with its own Roadmap and co-chaired Working Group. The 7 Roadmaps are: Grow Food, Aggregation, Processing, Storage, Distribution, Education and Coordination. Each Roadmap has quarterly deliverables starting with Planning and Funding. Five recommendations will launch the network and deliver results.

1. Focus on Solving Logistics Problems in a specific Goal area, following the Roadmap timeline for that Goal with a range of stakeholders in a co-chaired Working Group.
2. Use the “lead agency” model to solve shared problems including access to broadband internet, the labor shortage, agriculture in schools, marketing campaigns, mapping the network, shared funding and measuring results.
3. Strengthen organizational culture through diverse working groups, more active farmer feedback, and becoming more proactive with farmers and students.
4. Support grass roots advocacy efforts such as *97milk.com*, Farm Women United, the National Family Farm Coalition and other farmer-based policy initiatives.
5. Recommend that the Governor convene a 30-day “tiger team” to adopt a plain language version of VISION 2050 with one and two-year goals added and an emphasis on working teams as a performance network not a hierarchical structure.

Some may want more directions and more details. The intention of this report is to stay at the strategic level, not dip into tactics, to provide general guidance and then trust the co-chaired teams will move forward on their own energy. These recommendations will launch an empowered, self-organizing network of teams that will strengthen and improve the regional economy. Traditional, hierarchical leadership will have to learn to trust local farmers and support on-the-ground food and farm stakeholders.

PART TWO:

THE 7 ROADMAPS

This business plan has one focus: strengthen and expand Regional, Independent Food Processing. The key strategy is to work in co-chaired teams to solve logistics problems that disrupt the food supply chain for a specific goal area. This approach uses seven Goal areas, each with an accompanying Roadmap that is divided into quarterly activities over a two-year timeframe. This section provides more detail about the seven goals and Roadmaps:

Roadmap 1: Grow Food

Roadmap 2: Aggregation

Roadmap 3: Processing

Roadmap 4: Storage

Roadmap 5: Distribution

Roadmap 6: Education

Roadmap 7: Coordination



ROADMAP 1: GROW FOOD



ROADMAP 2: AGGREGATION



ROADMAP 3: PROCESSING



ROADMAP 4: STORAGE



ROADMAP 5: DISTRIBUTION



ROADMAP 6: EDUCATION



ROADMAP 7: COORDINATION

ROADMAP 1: GROW FOOD

The food supply chain begins when the farmer, rancher, fisher or other producer decides to plant, sow, grow, raise or catch food. The Goals and Roadmaps are arranged around the growing cycle, from planning and planting to harvesting. The goal of this Working Group is to focus on supporting farmers. The first actions of the Support Farmers Working Group is to assemble a team and then prioritize the issues raised repeatedly by farmers over the past years and focus on solving the top few. A second line of action is creating information centers for farmers.

ACTION 1: Establish Information Centers for Farmers

Our farmers need easy access to technical training, to current price information in the retail and wholesale markets, to grant opportunities and training courses on specific topics such “cost-benefits” or “producer readiness.” We propose at least two physical Farmer Information Centers in each of the three counties. The database is shared – the same information system and on-line courses. Each center could leverage existing facilities, though location must be a farmer-driven decision. Key points are:

1. Farmers interviewed for this report were very clear on what they wanted: technical assistance, government reform and some support coordinating grassroots advocacy.
2. Farmers want to learn more about market opportunities and coordinated distribution sites. Where do they get this information?
3. Farmers and distributors want to learn about advanced techniques, finding grants for expansion of manufacturing. Where do they get this information?
4. Farmers have policy gripes and it is not clear who will step forward and address those concerns. They want regional leadership to solve logistics problems such as the labor shortage. Some called for a NY State Strategic Plan for Agriculture.

Local farmers and producers want to take on the big issues, such as legislative hearings on a Farm Bill that gets the federal government out of the business of setting prices for different categories of milk. Farm Women United has long called for federal and state investigations of anti-competitive practices of monopolies in the food supply chain. The *97milk.com* movement wants serving whole milk in schools to be legal again. Many people, tired of the red tape and online requirements of government agencies, want to essentially reinvent the USDA. The team will rank these and other issues to determine early actions and projects. The information centers will provide data for priorities.

Roadmap 1: GROW FOOD has these major quarterly priorities:

Year 1:

PLANNING and FUNDING – Agree on goals and seek funding

BUILD – Start physical improvements or outreach to establish centers

USE – Do improvements grow the market?

HARVEST – How did the season go? Strengths and Areas for Improvement

Year 2:

BUILD – Continue physical improvements and expansions and solidify outreach

USE – Do improvements grow the market?

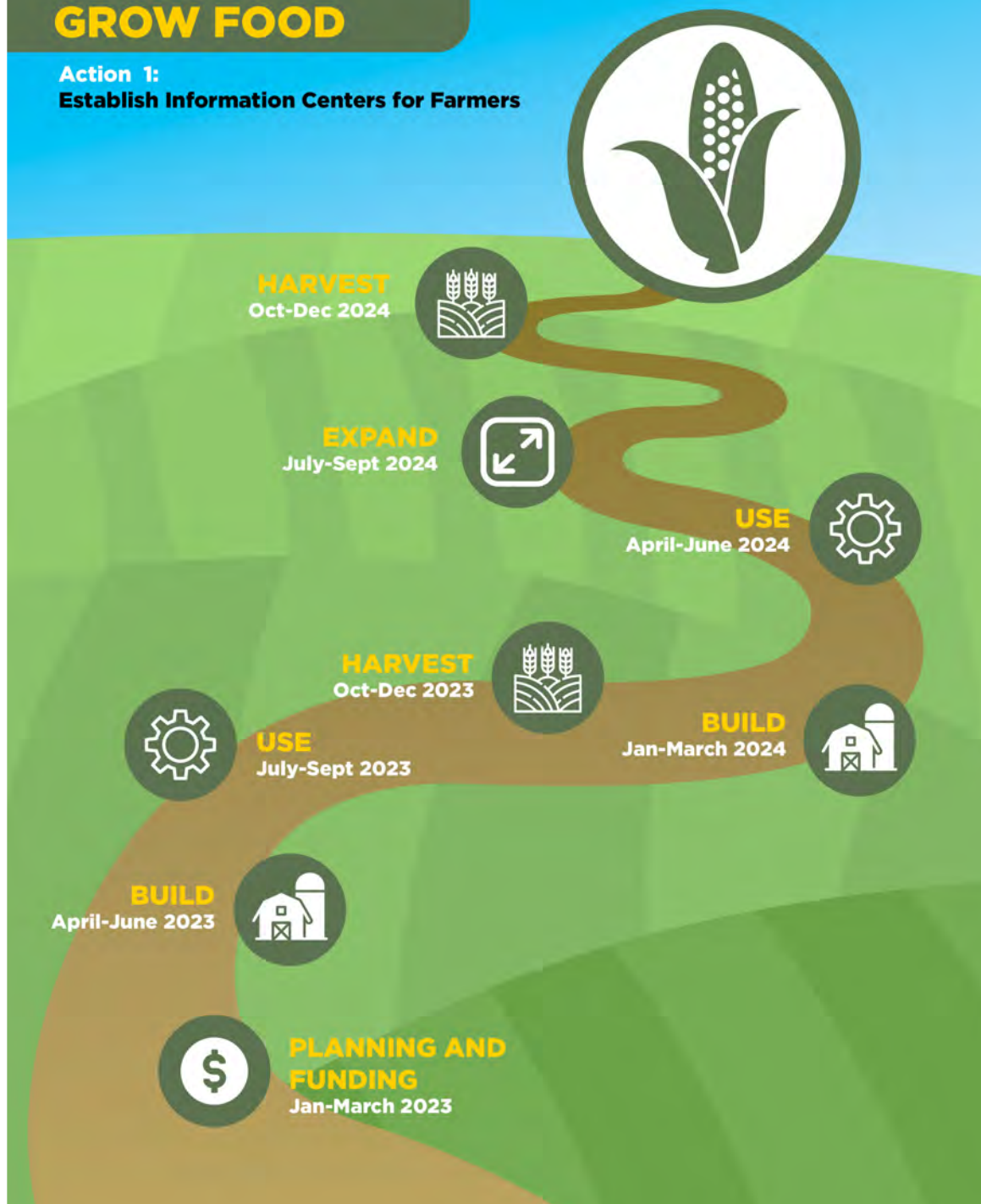
EXPAND – Increase, expand or improve information centers

HARVEST – How did the season go? Strengths and Areas for Improvement



ROADMAP 1: GROW FOOD

Action 1:
Establish Information Centers for Farmers



ROADMAP 2: AGGREGATION

After lots of conversations, especially reading the conclusions of the Vermont Report on Food Distribution and VISION 2050’s statewide and regional recommendations for agriculture in New York State, the decision was made to focus support on existing distributors and food hubs.

The goal of the Aggregation Working Group is to expand and smooth out that part of the food supply chain that brings foods together for the next step, such as storage or distribution. The co-chairs will assemble a team, then convene or survey the directors and managers of food hubs, aggregation points and Community Supported Agriculture (CSA) projects to find out what they need to grow and expand; and how best to get information on products, price points and specific processing needs to regional farmers.

ACTION 2: Support and Expand Existing Hubs

While discussing and collecting lists of food hubs, the consulting team realized different types of hubs had sorted themselves out:

- Distributors that receive products from farmers and transport them to customer lists
- Distributors that transport products to warehouses ready for “last mile” drivers
- A cooperative of farmers that sell, aggregate, store and transport products
- One expanding farm business that buys products from local farms, then aggregates, stores and transports those products to customers such as restaurants and grocers
- CSA (Community Supported Agriculture) hubs that receive, package and deliver foods for individual families as a weekly box of fresh vegetables, fruits and dairy

Team will prioritize ways to strengthen aggregation sites regionally.

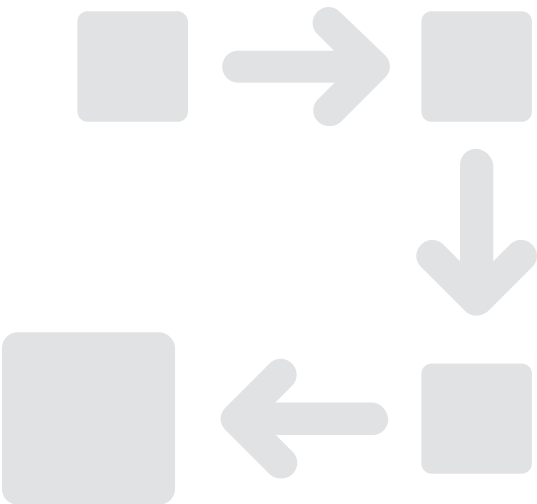
Roadmap 2: Aggregation has these major quarterly priorities:

Year 1:

- PLANNING and FUNDING – Agree on goals and seek funding
- BUILD – Start physical improvements on hubs or other facilities
- USE – How can improvements grow the market?
- HARVEST – How did the season go? Strengths and Areas for Improvement?

Year 2

- BUILD -- Further physical improvements on hubs or solidify outreach efforts
- USE – How can improvements grow the market?
- EXPAND – Increase or improve the infrastructure that supports farmers
- HARVEST – How did the season go? Strengths and Areas for Improvements?



ROADMAP 2: AGGREGATION

Action 2:
Support and Expand Existing Hubs



ROADMAP 3: PROCESSING

The initial purpose of the Processing Working Group is to convene the food hub directors and institutional purchasers to find out how best to share their information on products, price points and specific processing needs with regional farmers.

ACTION 3: Build and Expand Small Processing Facilities in Many Towns

The tri-county region does not need more food hubs. The hubs need to be better connected to the resources they need to expand or strengthen. Farmers need to know more about the wholesale product lists for different processors.

This region does need many, small and medium sized facilities to take food delivered from the fields yesterday and have it ready for lunchtime today, or tomorrow, or in three months. How is raw food prepped and processed to move along the food supply chain. How do we find storage and transportation including last-mile delivery? The region is low on food processing facilities of all sorts.

This is a town or county conversation – a fun one since many towns are already thinking about creating food centers by renovating abandoned jails, grain mills and 100-year old barns. Farmers need to know about different processing needs -- such as cutting raw carrots into sticks for lunch trays and then packaging them with yogurt-based ranch dressing for schools.

Roadmap 3: Processing has these major quarterly priorities:

Year 1:

PLANNING and FUNDING – Agree on goals and seek funding

BUILD – Start mapping, evaluating physical improvements for processing facilities

USE – Do improvements grow the market?

HARVEST – How did the season go? Strengths and Areas for Improvement

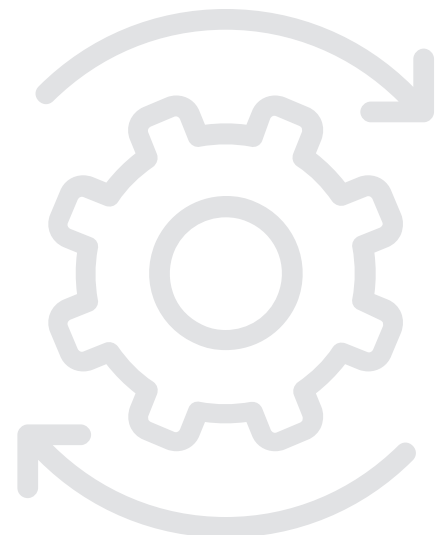
Year 2

BUILD – Further physical improvements on hubs or solidify outreach efforts

USE – How can improvements grow the market?

EXPAND – Increase or improve the infrastructure that supports farmers

HARVEST – How did the season go? Strengths and Areas for Improvements?



ROADMAP 3: PROCESSING

Action 3:
Build and Expand Small Processing Facilities



ROADMAP 4: STORAGE

The initial purpose of the Storage Working Group is to convene or survey the food hub directors and institutional purchasers to find out what foods have what storage needs as consumption of NY grown foods and products increases.

Action 4: Build and Upgrade Storage Facilities in Each County

When farmers and producers aggregate food products, storage needs arise. County and town leaders need to assess interest in and capacity for new, improved or expanded storage facilities, especially cold storage. Storage may be co-located with Processing. The location decisions are driven by the products needing storage.

Roadmap 4: Storage has these major quarterly priorities:

Year 1:

PLANNING and FUNDING – Agree on goals and seek funding

BUILD – Start physical improvements or evaluations for processing facilities

USE – Do improvements grow the market?

HARVEST – How did the season go? Strengths and Areas for Improvement

Year 2

BUILD – Further physical improvements on hubs or solidify outreach efforts

USE – How can improvements grow the market?

EXPAND – Increase or improve the infrastructure that supports farmers

HARVEST – How did the season go? Strengths and Areas for Improvements?



ROADMAP 4: STORAGE

Action 4:
Build and Upgrade Storage Facilities



GOAL 5: DISTRIBUTION

Transportation logjams haunt every effort to move food from different farms to different locations closer to consumers. The initial purpose of the Distribution Working Group is to convene or survey the regional distributors to identify ways to improve distribution channels. Farmers also need to know this information, along with price points and specific processing needs with regional farmers. The consulting team assumed the experts managing transportation will make their information needs and funding requirements known.

Drivers and transportation companies will need to create or change routes as more farmers aggregate food products and the food economy grows. Routes that link farms, food hubs, storage facilities and distributors will require more drivers, already in short supply. All this is within the skill sets of the experts doing this work currently. They will need the support and especially funding information from the Working Group.

The Farm-to-School projects have special distribution needs, especially drivers of small loads going to many locations. The highlighted action here is expanding Farm-to-School projects and the numbers of children who eat farm fresh food in school.

Action 5: Solve Farm-to-School Logjams

The network of specialists working on farm to Farm-to-School projects is expansive. One key is fine-tuning their pitch to school budget directors to use NYS monies to put fresh, local more nutritious food on the lunch tray. The problem is often the “last-mile” pickup and especially delivery. This Working Group is tasked with solving those logistics problems.

Roadmap 5: Distribution has these major quarterly priorities:

Year 1:

PLANNING and FUNDING – Agree on goals and seek funding

BUILD – Evaluate transportation needs and Farm to School status

USE – Do improvements move more food?

HARVEST – How did the season go? Strengths and Areas for Improvement

Year 2

BUILD – Further build out distribution infrastructure

EXPAND – Increase or improve the infrastructure that supports farmers

USE – How can improvements move more food?

HARVEST – How did the season go? Strengths and Areas for Improvements?



ROADMAP 5: DISTRIBUTION

Action 5:
Solve Farm to School Logjams



ROADMAP 6: EDUCATION

The three county Agriculture and Farmland Protection Plans (AFPPs) identified these challenges: Student Outreach and Internships, Consumer Education, and Media Campaigns. Three actions are assigned to this Working Group:

Action 6: Student Outreach and Internships

There are great teachers around connecting high school students with jobs in farming, forestry, ranching and environmental practices. Not all schools have experienced, proactive, agriculture teachers. Who can convene agriculture teachers to share best practices?

Action 7: Consumer Education

Most people do not know where their food comes from. They do not know how to grow food and raise animals. They rarely eat fresh, local, healthy food. A growing food economy requires a multi-media information campaign. Private investors are currently meeting to design such a campaign. The private investors believe: *There is no counter-narrative to the billions of dollars going into the lab-grown food message.*

Action 8: Launch media campaign

This action includes regional investments in events that connect buyers with farmers and producers, celebrate of diversity of NYS food products, and support farmers markets in the Southern Tier.

Roadmap 6: EDUCATION as these major quarterly priorities:

Year 1:

PLANNING and FUNDING – Agree on goals and seek funding

BUILD – Start physical improvements or evaluations for processing facilities

USE – Do improvements bring more participants?

HARVEST – How did the season go? Strengths and Areas for Improvement

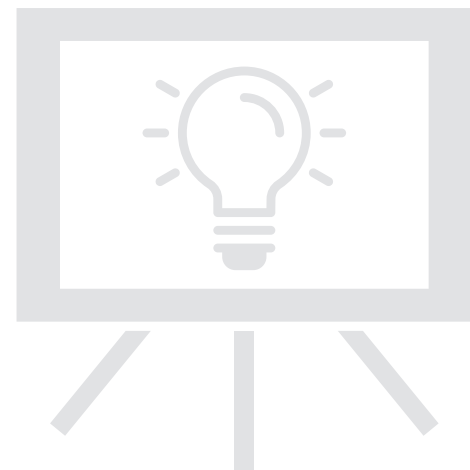
Year 2

BUILD – Further physical improvements on hubs or solidify outreach efforts

USE – How can improvements grow the market?

EXPAND – Increase or improve the infrastructure that supports farmers

HARVEST – How did the season go? Strengths and Areas for Improvements?



ROADMAP 6: EDUCATION

Action 6: Student Outreach and Internships

Action 7: Consumer Education

Action 8: Launch media campaign



HARVEST
Oct-Dec 2024



EVALUATE
July-Sept 2024



USE
April-June 2024



RESULTS
Oct-Dec 2023



EVALUATE
July-Sept 2023



EXPAND
Jan-March 2024



LAUNCH
April-June 2023



**PLANNING AND
FUNDING**
Jan-March 2023



ROADMAP 7: COORDINATION

The goals of the Coordination Working Group are to support the Working Group co-chairs and Action Team co-leaders, define a shared funding plan and determine a role regarding specific needs of the other Working Groups. Roadmaps interact, and these co-chairs will play a facilitating role.

Action 9: Establish Central Base of Operations with a Project Manager

One size does not fit all. One town may be thinking of a meat processing facility, another of a bottling plant, another of a farm store on Main Street. Many unmet needs relate to processing. Dairy, meat and produce need to be gathered, washed, sorted, packaged and stored until drivers pick up the products and bring them to central distributors or cafeterias or a customer list.

These regional efforts need a regional project manager and a central base of operations, including a plain-language, easy-to-navigate information system.

The counties and relevant agencies have to cooperate and re-build trust with generational farmers, traditional food producers, and other small businesses that have been at the rough end of farm policy sometimes for decades.

Roadmap 7: Coordination has these major quarterly priorities:

Year 1:

PLANNING and FUNDING – Agree on goals and seek funding

BUILD – Start physical improvements or evaluations for processing facilities

USE – Do improvements grow the market?

HARVEST – How did the season go? Strengths and Areas for Improvement

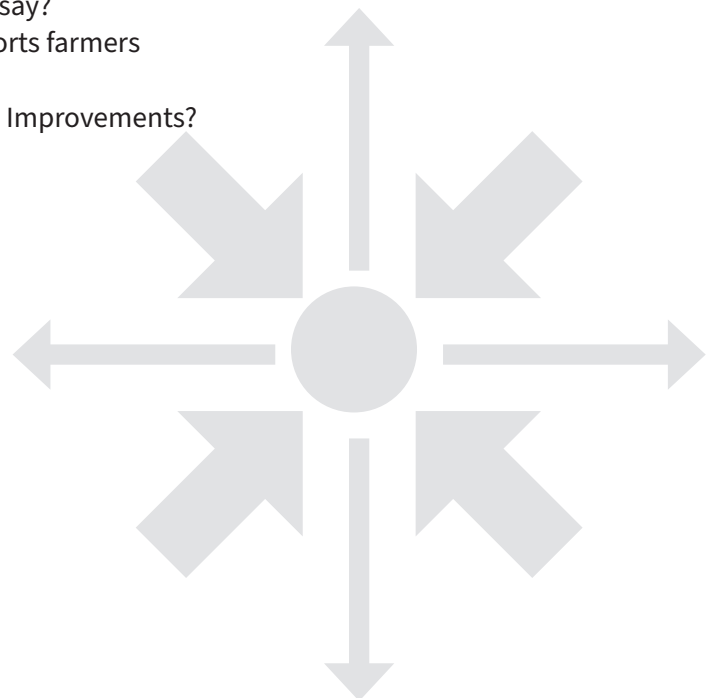
Year 2

EVALUATE – What changes are needed, what does the data say?

EXPAND – Increase or improve the infrastructure that supports farmers

USE – What improvements were actually implemented?

HARVEST – How did the season go? Strengths and Areas for Improvements?



ROADMAP 7: COORDINATION

Action 9:
**Establish Central Base of Operations
with a Project Manager**



FINAL COMMENTS

We wanted to close out this report with some personal comments.

Rick Osofsky's words may seem familiar:

There's nothing wrong with sustainable agriculture, nothing wrong with an 80-cow farm. The small farm changed the whole milk structure. There's a difference between a 60-cow farm and an 800-cow subsidized, contained animal processing operation.

There's something valuable about who we are and why we exist. There's a synergy between the earth and humankind. It's about sustainability. We are connected to the land, we are not connected in big factories.

Finally, my thoughts on this Plan and the 7 Roadmaps:

I believe in the power of face-to-face dialogue. I believe in the power of small groups empowered to solve local and regional problems. I believe this report will provide impetus to passionate food and farm stakeholders to launch a self-organizing, results-demanding and endlessly-coordinating performance network of diverse teams that share goals and values to improve regional, independent food processing.

APPENDIX A: FUNDING SOURCES

from Otsego County Agriculture and Farmland Protection Plan (AFPP, 2017)

Otsego County presented a listing of funding sources for agriculture producers and processors at state, federal, local and regional levels.

New York State Department of Agriculture and Markets Farmland Protection Implementation Grant (FPIG) Program funds the Purchase of Development Rights (PDRs or conservation easements) on farmland at risk of being lost to development. The program is highly competitive, a letter of support is required from the local AFPP Board. Info: https://www.agriculture.ny.gov/rfps/FPIG13/RFP0111_FPIG_Rnd_13.pdf

New York State Department of Agriculture and Markets Agricultural Nonpoint Source Abatement Program provides cost-share funds to reduce and/or prevent nonpoint source pollution from agricultural activities in watersheds. Info: https://www.agriculture.ny.gov/rfps/AGNPS_R23/R23_RFP.pdf

New York State Department of Agriculture and Markets Municipal Agricultural and Farmland Protection Planning Grants fund local efforts to maintain economic viability of agriculture, its land base, and environmental and preservation values. Info: <https://www.agriculture.ny.gov/rfps/MuniGrant>

New York State Department of Agriculture and Markets Good Agricultural Practices (GAP) Certification Assistance Program, since such certification is required by many major retailers, wholesale buyers, foodservice companies, restaurants and schools. Info: <https://www.agriculture.ny.gov/rfps/GAP/2012/GAP-Certification.pdf>

Empire State New Farmers Grant Fund helps beginning farmers expand or diversify, extend the season, increase sustainable practices, organic farming, food safety. Info: <https://esd.ny.gov/new-farmers-grant-fund-program>

Empire State Development Healthy Food and Healthy Communities Fund provides grants and loans for food markets and groceries in under-served communities. Info: <https://esd.ny.gov/businessprograms/healthyfoodhealthycommunities.html>

Empire State Development Fund Economic Development Fund (EDF) funds job creation activity including construction, expansion, machinery, working capital. Info: <https://esd.ny.gov/empire-state-economic-development-fund-program>

Otsego Now Agricultural Microenterprise Grant Program funds the start or expansion of agriculture operations, including acquisition, construction or renovation. Info: <http://otsegonow.com/projects/agricultural-microenterprise-grantprogram>

USDA Beginning Farmer and Rancher Development Program provides grants to non-organizations for education, mentoring, and technical assistance. Info: <https://nifa.usda.gov/funding-opportunity/beginning-farmer-and-rancher-developmentprogram-bfrdp>

USDA Natural Resources Conservation Service (NRCS) Conservation Reserve Program provides technical and financial assistance to farmers and ranchers to address soil, water, and related natural resource concerns and environmental laws. Info: <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/?cid=stelprdb1041269>

USDA Natural Resources Conservation Service (NRCS) Environmental Quality Incentives Program (EQIP) funds conservation practices that improve soil, water, plant, animal, air and related natural resources on farmland and forestland. Info: <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/>.

Otsego County and USDA Farm Service Agency Direct Loans assist farmers with purchasing and/or expanding their farm operations. Info: <https://www.fsa.usda.gov/programs-and-services/farm-loanprograms/farm-ownership-loans/index>.

USDA Farm Service Agency Direct Farm Operating Loans and Micro-Loans can help start, maintain, and strengthen a farm or ranch. Info: <https://www.fsa.usda.gov/programs-and-services/farm-loanprograms/farm-operating-loans/index>

USDA Rural Business Enterprise Grants Program targets technical assistance to develop or expand small and emerging private, rural businesses. Funds must benefit rural areas or towns; grants range from \$10,000 to \$500,000 with no cost sharing, Info: <https://www.rd.usda.gov/programsservices/rural-business-development-grants>

USDA Value-Added Producer Grant Program is national competition to help agricultural producers start value-added activities related to processing and/or marketing new products. Info: <https://www.rd.usda.gov/programs-services/value-added-producer-grants>

Otsego County and USDA National Institute of Food and Agriculture Community Food Projects Competitive Grants Program to meet food needs of low-income people through food distribution and community outreach, including equipment and marketing. Info: <https://nifa.usda.gov/funding-opportunity/community-foodprojects-cfp-competitive-grants-program>

from Delaware County Agriculture and Farmland Protection Plan (AFPP, 2017)

The Delaware County AFPP highlighted these funding sources, at the federal, state and county levels:

The Delaware County Department of Economic Development advises new and existing businesses on funding sources, especially low-interest loans info@dcecodev.com

The NYS Consolidated Funded Application (CFA) allows farms in the Southern Tier (including Delaware County) to access loans up to \$300,000 for new technology that extends the growing season, promotes regional products, or supports renewable energy and agritourism. Funding is available for growing, storing, processing, purchasing, promoting, and distributing, intergenerational farm transfer and new farm establishment.

The Rural Initiative Program provides capital through loan funds with priority given to projects that create new agriculture and forest-based jobs and develop new farm markets. Related is the Farmers Market Initiative.

Commercial Banks probably do not have a lending department prepared to work with a farm or agricultural business. NY banks with agricultural lending departments include Farm Credit (www.farmcrediteast.com), M&T (www.mtb.com), NBT Bank (www.nbtbank.com), Community Bank, NA (www.communitybankna.com), National Bank of Delaware County (www.nbdcbank.com) and The Delaware National Bank Of Delhi (www.dnbd.net).

Some county economic development programs have Micro-Enterprise Loan Funds or Revolving Loans Funds for Small Business with low interest rates for farm operations.

The concept of “Slow Money” (www.slowmoney.org) includes investor circles that fund local food systems. Many Community Supported Agriculture (CSA) groups fundraise from their membership to buy land or build facilities, usually offering repayment plus interest in the form of farm products. FarmStart invests working capital in beginning farmers and farmer cooperatives with promising business models. No down payment 5-year loans up to \$50,000; requires positive cash flow.

U.S. Small Business Administration Microloan Program provides small, short-term loans to small businesses and certain types of not-for-profit child-care centers.

New York State has many agriculture funding programs: <http://www.agriculture.ny.gov/>

NYS Funding for Organic Certification will reimburse producers for a portion of their annual organic certification renewal costs up 75% reimbursement or \$750 http://www.agriculture.ny.gov/AP/Organic/docs/2009_Farmer_Application_Form.pdf

NYS Specialty Crops Block Grants Program funds projects that increase the competitiveness of specialty crops, encourage efficiency, partnerships, innovation, and new markets; can be equipment such as packaging and labeling, or distribution, education, food safety, marketing, plant health and international trade.

Grow NY’s Enterprise Program provide grants or loans for expansion related to production, processing or marketing of agricultural products. Eligibility: Municipalities under 50,000, must have other funding in place. Job creation required: 1 job per \$7,500 invested. Minimum of \$100,000 up to \$750,000 <http://www.agriculture.ny.gov/GNYRFP.html>

NYS Dept. of Ag & Markets – Agriculture & Farmland Protection Projects – must work with a municipality and be part of a county AFPP. State assistance for the purchase of conservation easements (development rights) to restrict development of farmland. Eligibility: Counties <http://www.agriculture.ny.gov/AP/agsservices/farmprotect.html>

NYS DEC Water Quality Improvement Projects through your county Soil and Water Conservation District for programs funds to improve water quality

NYSERDA - New York State Energy Research and Development Authority: Loans, grants and incentives for farm waste management (biogas); energy efficiency; solar and wind generation; innovation in energy conservation. NYSERDA <http://www.nyserda.ny.gov> / For agriculture <http://www.nyserda.ny.gov/Page-Sections/Commercial-and-Industrial/Sectors/Agriculture.aspx>

NESARE - Northeast Sustainable Agriculture Research & Education Farmer Grants: For commercial farmers to test new ideas in a field trial, on-farm demonstration, marketing initiative. Applications online November to December for Spring awards.

USDA Business and Industry Loan Guarantees part of USDA Rural Development especially to promote long-term job development.

USDA Rural Cooperative Development Grants to establish and operate centers of cooperative development, The Watershed Agricultural Council used this funding to help establish the Catskill Family Farm Cooperative.

Rural Business Enterprise Grants to public or not-for-profit organizations to develop small and emerging businesses. Start with regional USDA Rural Development office.

Rural Business Opportunity Grants

Funding Sources from the Schoharie County Agriculture and Farmland Protection Plan (AFPP, 2017)

Agency/Organization	Agency/Organization
American Farmland Trust, New York Office http://newyork.farmland.org	http://www.nyfarmnet.org
Cornell Cooperative Extension of Schoharie and Otsego County http://cceschoharie-otsego.org/	NYS Department of Agriculture and Markets http://www.agriculture.ny.gov/
Cornell Farm to School Program http://farmtoschool.cce.cornell.edu	NYS Energy Research and Development Authority http://www.nyserda.org
Cornell Small Farms Program http://smallfarms.cornell.edu	New York Sustainable Agriculture Working Group http://www.ny-sawg.org
Dirt Capital Partners www.dirtpartners.com	Northeast Beginning Farmers Project http://nebeginningfarmers.org
Equity Trust www.equitytrust.org	Northeast Center for Food Entrepreneurship http://necfe.foodscience.cals.cornell.edu
Farm Aid http://ideas.farmaid.org	Northeast Organic Farming Association http://www.nofa.org/index.php
Farm Credit East http://www.farmcrediteast.com	Northeast Sustainable Agriculture Research and Education http://www.nesare.org
Farmer Veteran Coalition http://www.farmvetco.org	Rodale Institute Your Two Cents Fund http://rodaleinstitute.org/assets/TwoCentsRFP-20Acre+.pdf
Farmers Market Federation of New York http://www.nyfarmersmarket.com	Small Scale Food Processors Association of New York http://www.nyssfpa.com
Heroic Food Farm http://heroicfood.org/	Schoharie County Planning http://www.schohariecounty-ny.gov/CountyWebSite/Planning/planninghome.html
National Farm to School Network http://www.farmtoschool.org	Schoharie County Farm Bureau http://www.nyfb.org/about_nyfb/new_york_county_farm_bureau_detail.cfm?ID=47
National Good Agricultural Practices Program http://www.gaps.cornell.edu	Schoharie County Soil & Water Conservation District http://Schohariecountyswcd.org
National Sustainable Agriculture Information Service http://attra.ncat.org/index.php	USDA Agricultural Marketing Service http://www.ams.usda.gov
National Young Farmers Coalition http://www.youngfarmers.org	USDA Farm Service Agency http://www.fsa.usda.gov/FSA http://www.usda.gov/wps/portal/usda/newfarmers?navid=getting-started
New England Small Farm Institute http://www.smallfarm.org	USDA Natural Resources Conservation Service http://www.nrcs.usda.gov
New York Ag Connection http://www.newyorkagconnection.com	USDA Rural Development, http://www.rurdev.usda.gov/NYHome.html
New York Farm Bureau http://www.nyfb.org	U.S. Farmstay Association http://www.farmstayus.com/for-farms/starting-a-farm-stay
New York Farm Viability Institute http://www.nyfvi.org	WWOOF (World Wide Opportunities on Organic Farms) http://www.wwoof.net
New York FarmLink http://www.newyorkfarmlink.org	
New York FarmNet	

APPENDIX B: REGIONAL FOOD DISTRIBUTORS

Upstate Growers and Packers www.unygap.com

An aggregation model for farmers to sell excess or wholesale products. UGP is currently working to expand beyond 23 farms to cover more of Clinton County, Syracuse, Rochester and Utica. They deliver to New York City.

Regional Access www.regionalaccess.net

Started in 1989, now 25,000 square foot facility outside Ithaca. They are community-oriented, focusing on locally grown products with truck service throughout Otsego. They could grow to be a viable intrastate logistics opportunity.

Baldor Food Company www.baldorfood.com

Large food distribution company in Northeast and Mid-Atlantic regions with over 1,000 partner farms and a catalog of 6,000 items and 1,000 fresh cut options. Started in 1946 as Balducci's fruit stand in New York City. Company often does last mile delivery in NYC. Farmers need to find out what crops are wanted (corn, potatoes, beans) and what prices are paid for wholesale

Headwater Food Hub www.headwaterfoodhub.com

Traditional food hub in Ontario NY outside Rochester, currently serves 220 farmers who sell at a higher price though hub structure not always profitable. They focus on helping farmers and the overall food ecosystem.

Byrne Dairy www.byrnedairy.com

Began in 1933 selling milk in glass bottles to Central NY homes in horse-drawn wagons. Byrne is a now fourth-generation, family-owned producer and distributor of milk, cream, ice cream and other dairy products. Byrne Dairy processes 50 million pounds of milk per month, mostly from nearby dairy farms. Byrne is building better facilities for shelf-stable or "aseptic" milk production.

Eden Valley Growers www.edenvalleygrowers.com

Eden Valley Growers operates the Western NY Food Hub that provides about 50 to 60 qualified growers with immediate access to wholesale markets.

Capitol Area Growers www.capitalroots.org

The Urban Grow Center is a regional food hub founded to improve access to nutritious food in the Troy-Albany NY capital region. They started in 1972 as the Capital District Community Gardens with 8 community gardens and helping people grow their own vegetables. They bought their first permanent garden site in 1981 and became advocates for community gardening with state and federal government agencies. With 34 garden sites in Albany and Rensselaer Counties serving 500 families, they have become a model for other cities.

Hudson Harvest www.hv-harvest.com

The first line on their website is: *We sell the highest quality, source-transparent food from local farmers and producers we trust.* This traditional food hub started in 2011 to build long-term reliable outlets for small, local farmers and producers, primarily in the Hudson Valley. They source from 70 local farmers, cheesemakers, butchers and small food producers

Hudson Valley Farm Hub www.hvfarmhub.org

Hudson Valley Food Hub is a non-profit center for regenerative agriculture farming 1,5000 acres in Hurley, NY. They offer advanced courses to farmers and support agriculture research. They believe in whole-farm rotation of vegetables, field crops and cover crops. They know that healthy food cannot be grown on unhealthy land.

A Single Bite Catskills Food Hub www.asinglebite.org

Formerly the Catskills Food Hub, based in Liberty, New York, A Single Bite focuses on delivering real, local food and working closely with educators and schools. The facility had loading docks, refrigerated trucks and skilled drivers that move food.

Catskills Agrarian Alliance www.catskillsagrarianalliance.org

About ten years ago, Catskills Agrarian Alliance (CAA) began aggregating and transporting food from family farms in Otsego, Delaware, Sullivan and Schoharie farm to New York City markets. They deliver truckloads to NYC restaurants and grocers. In 2022, more than 40 farms sent vegetables, dairy foods, eggs, maple and honey, specialty farms (flowers, pasta and chocolate) and more to NYC markets, mutual aid groups and upstate markets and schools.



Project Implementation Profiles





Project Implementation Profile

Project Code: DS-97

Project Sponsor: [97Milk.com](https://97milk.com)

Unique Approach: Today, 97 Milk is run by 5 board members and the help from many agri-business professionals and dairy farmers. The goal for 97 Milk is to share milk facts with consumers, share the dedication and passion of family-owned dairy farmers and help answer milk questions.

Roadmap Focus: Education

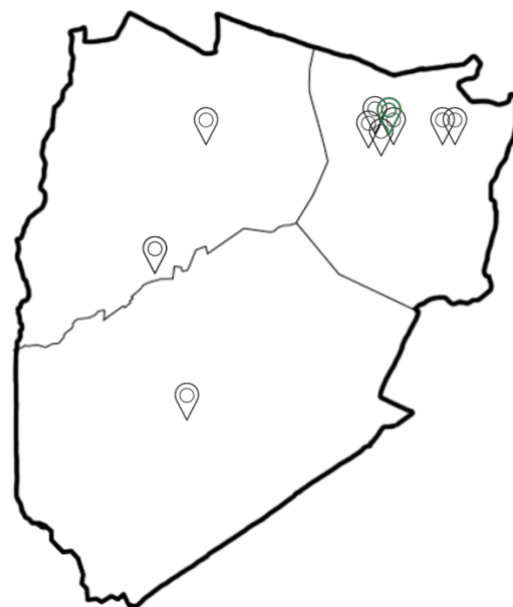
Immediate Needs: 2023-2027

	Use	Description	Estimated Cost
Management	Establish a 97 Milk Chapter	Connect with consumers directly	\$5,000
Programming	Promotional Materials	Banners, stickers, flyers etc. for distribution at events	\$10,000

Target Market: Consumers, students, fairs

Funding Targets: Appalachian Regional Commission
Corporate Sponsors
County Agriculture Supporters

Contact: Duane Spaulding (518) 234-8782



*Regional Independent Food Processing | Northeast ARC Implementation
New York: Delaware, Otsego & Schoharie County Service Area
December 2022*



Project Implementation Profile

Project Code: [CADE-2050](#)

Project Sponsor: Center for Agricultural Development & Entrepreneurship

Unique Approach: Developed a New York State Vision for a Profitable, Regenerative, Equitable & Healthy Food System Future by 2050

Roadmap Focus: Education, Coordination

Immediate Needs: 2023-2027

	Use	Description	Estimated Cost
Facilities/Equipment	Production/Equipment	Shared-use equipment, farm machinery and cold storage	\$250,000
Programming	Education	Buy local campaigns, encourage Farm to School, NY Ag in Classroom, Cross Promotion	\$25,000
Programming	Production/Market	Set targets for active farms and farmland growth	\$5,000
Programming	Workforce Development	Logistics/trucking and processing (especially meat processing facilities and creameries, as well as grain mills, fruit processors, cideries, breweries, distilleries, etc.)	\$150,000

Target Market: Farmers, Institutions

Funding Targets: Appalachian Regional Commission
Empire State Development
NYS Ag & Markets
USDA Rural Development

Contact: Phoebe Schreiner (607) 433-2545

*Regional Independent Food Processing | Northeast ARC Implementation
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Project Implementation Profile

Project Code: CCE-1

Project Sponsor: [Cornell Cooperative Extension, Farm to School](#)

Unique Approach: The Farm to School Program provides the opportunity for school cafeterias to serve more local, farm fresh food to students, offer education in the classroom on where food comes from, and overall strengthens the local community.

Roadmap Focus: Education, Coordination

Immediate Needs: 2023-2027

	Use	Description	Estimated Cost
Programming	Coordination	Policy Education, Cooperative Bidding, Order Aggregation	\$25,000
Other	Forum, Special Event (Speed Dating)	Fun and effective farmer introductions to school district leadership	\$5,000

Target Market: Institutions, 30 tri-county service area school districts

Funding Targets: Appalachian Regional Commission
NYS Ag & Markets
Corporate Sponsors/Foundations

Contact: Shannon Sears (518) 234-4303



*Regional Independent Food Processing | Northeast ARC Implementation
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Project Implementation Profile

Project Code: CAS-1

Project Sponsor: [Cobleskill Agricultural Society](#)

Unique Approach: Not for profit leadership and facilities to leverage in a central location with access to public infrastructure – road systems, water, sewer, three-phase electric and natural gas.

Roadmap Focus: Aggregate, Process, Storage

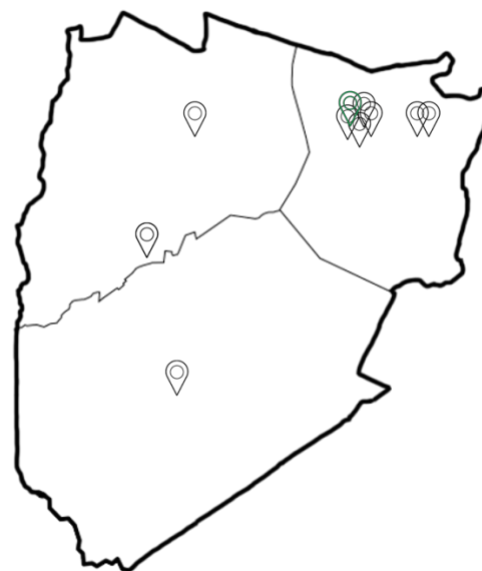
Immediate Needs: 2023-2027

	Use	Description	Estimated Cost
Management	Working Capital	Project Lead, Coordinator	\$125,000
Facilities/Equipment	Processing Center	Food Safe Building, \$85 psf	\$425,000
Facilities/Equipment	Processing Equipment	Wash, Prep, Freeze	\$235,000
Facilities/Equipment	Cold Storage	Coolers, Freezers	\$200,000
Programming	Food System Outreach	Logistics Coordination	\$35,000

Target Market: Farmers, Retail/Wholesale Buyers

Funding Targets: Appalachian Regional Commission
Empire State Development
NYS Ag & Markets
USDA Rural Development

Contact: Brendon Becker (518) 234-2123



*Regional Independent Food Processing | Northeast ARC Implementation
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Project Implementation Profile

Project Code: SCOAD-1

Project Sponsor: [Schoharie County Office of Agricultural Development \(OAD\)](#)

Unique Approach: The goal of the Office of Agricultural Development is to facilitate the coordination of resources among both agricultural producers and the agencies working to grow the agricultural sector of Schoharie County. This effort is done by encouraging collaboration and coordination, researching the agricultural needs of the county, pursuing funding sources to meet those needs, and acting in a representative capacity for the agricultural producers of Schoharie County.

Roadmap Focus: Education, Coordination

Immediate Needs: 2023-2027

	Use	Description	Estimated Cost
Programming	One-Stop Shop	Connect with funding and education opportunities, Informational materials	\$12,000
Programming	Outreach, Training	Enroll in NYS Grown & Certified	\$45,000

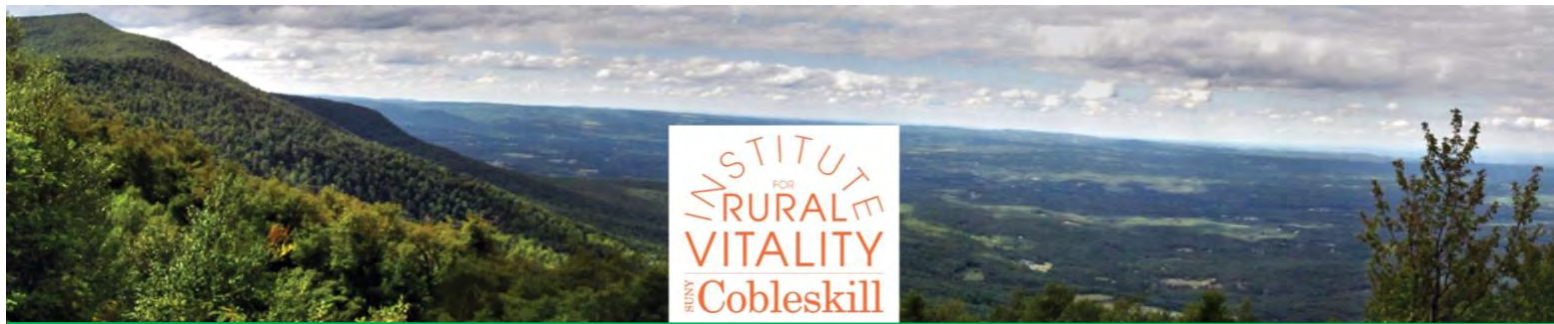
Target Market: Farmers

Funding Targets: Appalachian Regional Commission
NYS Ag & Markets
USDA Rural Development
Corporate Sponsors

Contact: Nick Kossman (518) 295-8785



*Regional Independent Food Processing | Northeast ARC Implementation
New York: Delaware, Otsego & Schoharie County Service Area
December 2022*



Project Implementation Profile

Project Code: IRV-1

Project Sponsor: [SUNY Cobleskill Institute for Rural Vitality](#)

Unique Approach: The Institute for Rural Vitality at State University of New York Cobleskill has a clear mission that encompasses a broad range of initiatives and activities: to engage the substantial resources of SUNY Cobleskill in collaboration with regional partners through its five distinct centers, specifically Farm & Food Entrepreneurship as well as its USDA Ag Innovation Center.

Roadmap Focus: Process, Education

Immediate Needs: 2023-2027

	Use	Description	Estimated Cost
Management	Project Advisory	Service fees for project leadership & guidance	\$25,000
Facilities/Equipment	Processing Equipment	Shared-use implements	\$75,000
Programming	Market Development	Address food scarcity, assist farmers to grow and expand business	\$2,000,000

Target Market: Farmers, Institutions

Funding Targets: Appalachian Regional Commission
NYS Ag & Markets
USDA Rural Development

Contact: Dr. S. Scott Ferguson (518) 255-5462

*Regional Independent Food Processing | Northeast ARC Implementation
New York: Delaware, Otsego & Schoharie County Service Area
December 2022*





Project Implementation Profile

Project Code: RIFP-2

Project Sponsor: [Schoharie Economic Enterprise Corporation \(SEEC\)](#)

Unique Approach: Through the lens of a not-for-profit economic development organization, facilitate a student-driven *Food System Action Plan* that may result in community independence and resiliency. Specifically, define targets related to access to healthy foods, investments in supply chain and reduction in food waste and related solid waste. This is akin to master planning documents that counties use to do long-range planning for a variety of sectors – land use, infrastructure, transportation, economic development and farmland protection.

Roadmap Focus: Education, Coordination

Immediate Needs: 2023-2027

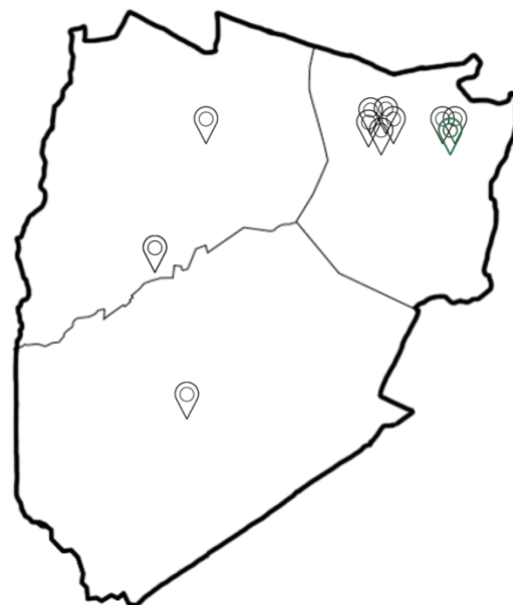
	Use	Description	Estimated Cost
Facilities/Equipment	Software	Database of critical resources, product pricing, etc.	\$45,000
Facilities/Equipment	Delivery Van	Shared-use van for local pick-up and deliveries	\$55,000
Programming	Planning and Outreach	Forums directed at community youth engagement, discuss and prioritize actions	\$65,000

Target Market: Community Youth, FFA Chapters and SUNY

Funding Targets: Appalachian Regional Commission

Contact: Julie Pacatte (518) 517-1700

Regional Independent Food Processing | Northeast ARC Implementation
New York: Delaware, Otsego & Schoharie County Service Area
December 2022





Project Implementation Profile

Project Code: CAA-1

Project Sponsor: [Catskill Agrarian Alliance](#)

Unique Approach: Modeling Food Sovereignty in the Catskills by protecting and promoting the right of all people to healthy, culturally-appropriate food produced through ecologically sound and sustainable methods, as well as by supporting our right to define our own food systems.

Roadmap Focus: Grow, Aggregate, Process, Distribute, Coordination

Immediate Needs: 2023-2027

	Use	Description	Estimated Cost
Management	Working Capital	Living wages, job retention & job creation LMI persons	\$240,000
Facilities/Equipment	Logistics Software	Build online clearinghouse for aggregation, inventory and order fulfillment	\$65,000
Facilities/Equipment	Eco-Fleet, electric delivery vans	Bollinger Motors, 1 electric van, regional entrepreneur	\$150,000
Programming	School Outreach	Nutrition Campaign	\$28,000

Target Market: Institutions

Funding Targets: Appalachian Regional Commission
Community Development Block Grant
Mission-driven Investors
Private Foundations

Contact: Tianna Kennedy (718) 791-1966



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Project Implementation Profile

Project Code: CrannMor-1

Project Sponsor: [CrannMor Advisors](#)

Unique Approach: Innovating Agriculture Through Nature-Based Solutions and a Commercial Mindset.

Roadmap Focus: Grow, Process, Distribution, Education, Coordination

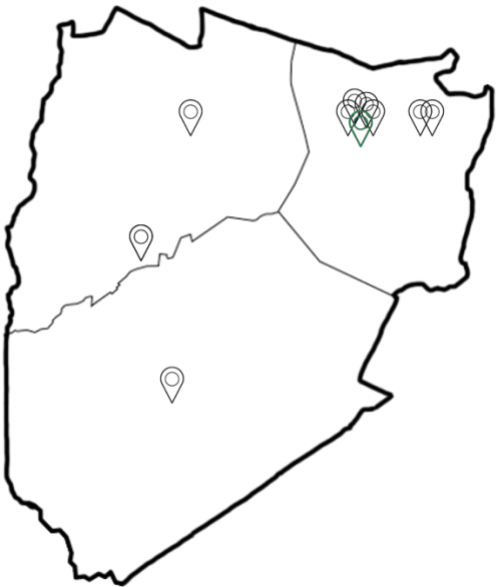
Immediate Needs: 2023-2027

	Use	Description	Estimated Cost
Facilities/Equipment	Farm Equipment	Shared-use farm machinery	\$200,000
Inventory	Nursery Stock	Regenerative , agroforestry tree and shrub materials	\$750,000
Programming	Nut Processing Feasibility	Business plan to determine costs and scalability for hazel and chestnut processing	\$85,000

Target Market: Specialty Retail/Wholesale

Funding Targets: Appalachian Regional Commission
Empire State Development
NYS Ag & Markets
Mission-driven Investors

Contact: Kevin Maher (973) 919-9979



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Project Implementation Profile

Project Code: HH-1

Project Sponsor: [Highland Hollow Farm](#)

Unique Approach: The uniqueness of Highland Hollow goes beyond quality products to an on-farm USDA certified processing facility. This both reduces stress on animals by eliminating travel at the time of processing and prevents interruptions in supply chain.

Roadmap Focus: Grow, Process, Storage, Distribution

Immediate Needs: 2023-2027

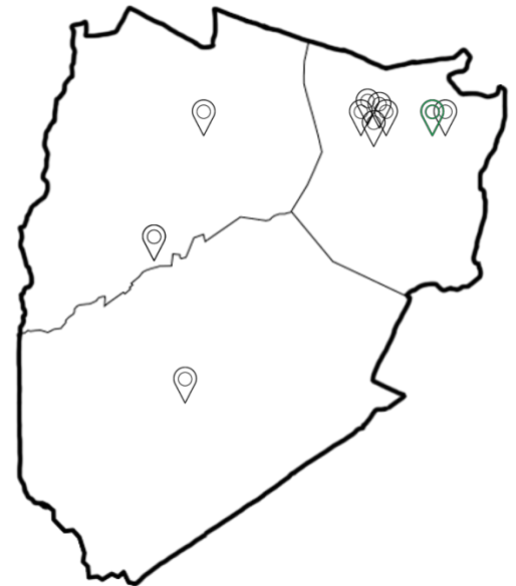
	Use	Description	Estimated Cost
Management	Workforce Development	Payroll, credentialling	\$18,000
Facilities/Equipment	Cold Storage	Coolers, rail systems	\$248,000
Facilities/Equipment	Processing Equipment	Labeler, Patty O Matic, Cryovac, Tools	\$84,000
Facilities/Equipment	Work Stations	Lab coats, soaps, hoses, sinks, tables	\$16,000

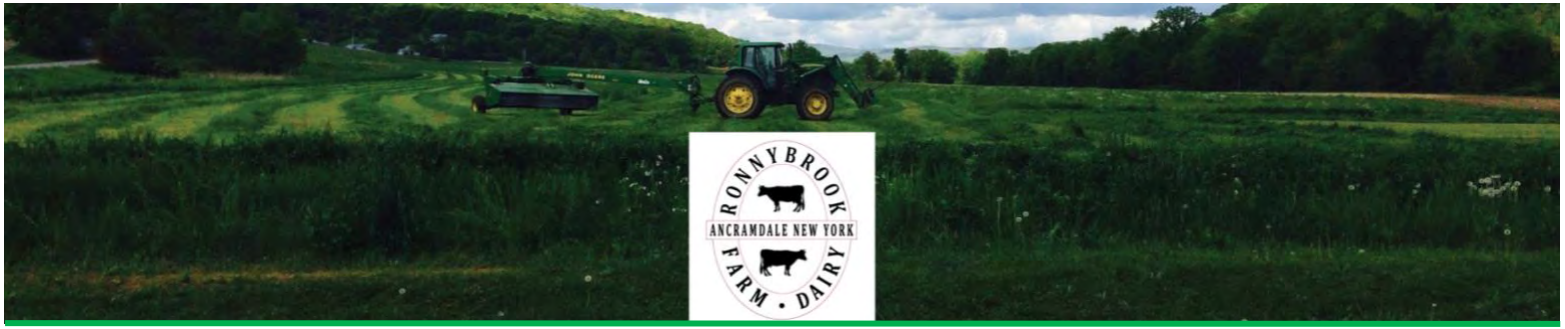
Target Market: Specialty Retail, Wholesale

Funding Targets: Appalachian Regional Commission
USDA Rural Development

Contact: Dave or Benaye Raylinsky (518) 269-9088

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Project Implementation Profile

- Project Code:** RF-1
- Project Sponsor:** [Ronnybrook Farm](#)
- Unique Approach:** Provides a local source of fresh minimally processed all natural dairy products wrapped up in an overriding commitment to the humane treatment of animals. The New York Times described Ronnybrook Farm's products as the “Dom Perignon” of dairy. Expanded product lines include its highly acclaimed chocolate milk, Creamline™ yogurt, drinkable yogurt, European Style Butter (84%-86% butterfat), crème fraiche, sour cream, egg nog, buttermilk and ice cream.
- Roadmap Focus:** Grow, Process, Distribution, Coordination
- Immediate Needs:** 2023-2027

	Use	Description	Estimated Cost
Facilities/Equipment	Fleet	Mid-size climate-controlled delivery and milk trucks (2)	\$175,000
Programming	Workforce Development	Recruit, driver certification, food safe training	\$85,000
Other	Legal	Org structures, Cooperative	\$35,000

- Target Market:** Holistic Dairy Farmers, Specialty Retail/Wholesale
- Funding Targets:** Appalachian Regional Commission
USDA Rural Development
- Contact:** Rick Osofsky (800) 772-6455

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