

Regional Economic Development Council of the Southern Tier *Southern Tier Food and Agriculture Initiative Proposal*

The Southern Tier Food and Agriculture Initiative envisions a future where we are a world-recognized leader in new agriculture technology and serve as a key food supplier for the Eastern Coast of the United States. This will be achieved via a strategic mix of projects that will transform the economy by enhancing production, processing, and distribution across the region, while also strengthening linkages to growing tourism and manufacturing and manufacturing industries.

Agriculture is one of America's most profitable business sectors. In the Southern Tier, the agriculture and food system produces \$5.2 billion in output, or 9.5% of the region's total economy. These sectors make up 11.5% of the total regional employment with 45,000 jobs, and produce \$2.1 billion annually in value added (inputs subtracted from total output) for the Southern Tier economy. The value added as a percentage of the economy is 6.8%, higher than the New York State's 4.3%, illustrating that this industry drives economic growth in the Southern Tier (Schmit, 2012).

Agriculture and food industries in New York State have output multipliers of between 1.79 and 1.98, meaning that each dollar expenditure in these sectors generates nearly an additional dollar of activity in the overall economy. The food manufacturing sector has a high employment multiplier of 3.17, indicating that for every job created in food manufacturing three additional jobs are generated elsewhere—the food manufacturing multiplier is one of the highest in the state when compared across all industries (Schmit, 2012).

Opportunity for Transformation

Why agriculture and food for the Southern Tier?

Our assets in agriculture are strong and unique. We have 6,600 farms, more than any other region; we are home to the College of Agriculture and Life Sciences at Cornell University that is ranked in the top 2 in the world in agriculture and plant sciences (USNews, QS World University Rankings); we have abundant fresh water; we sit at the crossroads of rail lines and major interstates, giving us access to distribution; and we sit within 500 miles of over 115 million people (freemaptools.com).

The regional trend in food production and distribution already has great momentum. Between 2009 and 2013 the food manufacturing sector gained over 1,000 jobs in the Southern Tier, more than any other industry and 41% of the existing workforce. The food processing cluster, or geographic concentration of related food industries, showed an 18% increase in jobs between 2011 and 2013 (UBRI, 2015).

What are the strategies for capitalizing on these opportunities?

We propose four strategies to make our region a global leader in agriculture and food production. The following strategies are designed to illustrate the potential for a robust Southern Tier Food and Agriculture Initiative, but are not intended to encompass all possible strategies and activities. Rather, these strategies provide a base from which to generate impactful activities over the five-year life of the Upstate Revitalization Initiative.

First, we will increase the diversity and access to food processing facilities around the region. Without slaughterhouses, meatpacking and poultry processing facilities, dairy processing facilities, and aseptic packaging facilities for vegetables, farmers are held back in increasing their production. Just as the explosion of the yogurt business helped grow New York State’s dairy processing industry into the largest in the nation and to drive the dairy production industry to be the third largest in the nation, processing is a critical link in the chain.

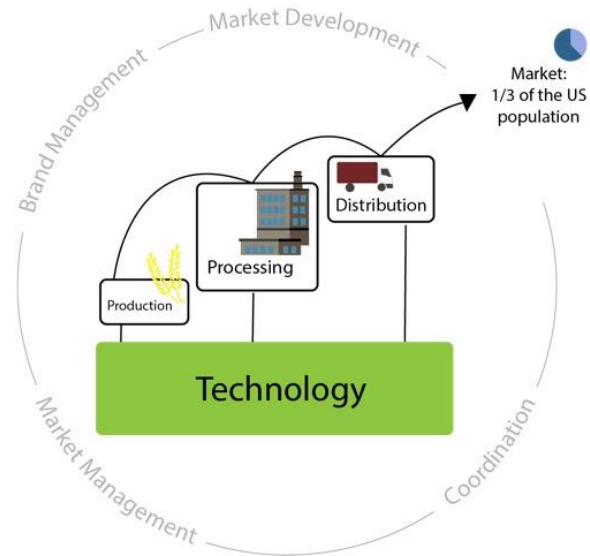
Activity Examples:

- *Food Processing:* Aseptic packaging facility, USDA-certified slaughterhouse/meatpacking facility, dairy processing facility, Stonyfield Organic dairy processing facility, Binghamton Food and Beverage Business Incubator (led by Binghamton LDC, SUNY Broome), Ultra-Premium Beverage Center (Schuyler County), Finger Lakes Fresh Food Hub Upgrades, Regional Food Processing and Production (led by TCAD), beer/cider production facilities.
- *Business Development and Coordination:* We will form the Southern Tier Agriculture and Food Development Cooperative, an independent entity leveraging regional support to identify processing facility sites and developers, link producers with processing facilities, and provide business development services to ensure the right processing facilities get built in the right places and that producers are linked into these sources of demand to “pull” production from farms into the supply chain.
- *Capital:* Loan funds including refueling the Rural Initiative Fund, loan guarantees, direct public capital investments with private match.

Second, we will increase distribution by expanding opportunities within the region and by utilizing our location at the crossroads of Upstate New York and within a day’s drive to a third of the U.S. population to increase distribution centers and networks for agricultural products from ours and other regions.

Activity Examples:

- *Distribution Facilities:* Refrigerated distribution facility/refrigerated transportation hub, Stonyfield Organics Distribution facility, Binghamton Distribution Hub, Community Supported Agriculture (CSA) Marketing
- *Technology Extension:* Exporting commercialized products developed through research and development, including controlled environment agriculture and plant science/agriculture development.



- *Business and Brand Development:* The Southern Tier Agriculture and Food Development Cooperative will identify distribution facility sites and developers, link producers and processors with distribution facilities, and collaborate with regional tourism initiatives and strategies to create and manage a Southern Tier food and agriculture brand. The food and agriculture brand will be developed in response to a growing interest in agri-tourism within the region.
- *Capital:* Loan funds including refueling the Rural Initiative Fund, loan guarantees, direct public capital investments with private match, public operating funding with private contributions from members of the regional ecosystem.

Third, we will develop and deploy new agricultural technologies – extending the growing season through controlled environment agriculture (CEA) such as greenhouses, high tunnels, hydroponics, and other structures. These technologies will help the Southern Tier transition from being a highly seasonal occasional provider to a reliable source of supply for the East Coast foodshed. To enable this vision, we will pioneer the use of clean energy technologies such as anaerobic digesters, solar, wind, and earth source heat to reduce the cost of controlled environment agriculture production, 75% of which is attributed to energy costs. This work will be led by key regional innovation assets such as the Greenhouse Lighting and Systems Engineering consortium (GLASE, partnership between CALS and the Rensselaer Polytechnic Institute), which is a candidate for funding from NYSERDA.

Through plant metabolomics we will support industrial processes, a vigorous startup environment, and the future development of a new pharmaceutical cluster in the Southern Tier. Advances in plant science and commercialization will be supported by the School of Integrated Plant Science, Biological and Environmental Engineering Department, Food Venture Center, and the Kevin M. McGovern Family Center for Venture Development in the Life Sciences.

These new technologies will not only create and support new agriculture within the region, but also represent manufacturing and engineering jobs as these systems are exported out of the region to other parts of the country and world.

Activity Examples:

- *Research and Development:* Center for Excellence in Controlled Environment Agriculture (potential partnership with GLASE) to develop technology such as lights, solar panels, glass systems, controls; Renewable energy such as anaerobic digesters, wind and solar, and ground source heat.
- *Business Development:* The Southern Tier Agriculture and Food Development Cooperative will identify CEA sites and developers, attract and execute private investment contracts, and convene regular agricultural technology summit events to showcase the leadership of the Southern Tier in developing, deploying, manufacturing and exporting new agriculture technologies.
- *Capital:* Loan funds including refueling the Rural Initiative Fund, loan guarantees, direct public capital investments with private match.

Fourth, we will promote and leverage existing and new support structures for growers and producers in the region, including the already approved and funded \$30 million Southern Tier Agricultural Economic Development Initiative, to help expand farms and increase their profitability. We will complement this growth with workforce development programs to help educate future farmers and replace an aging farmer population.

Activity Examples:

- *Operating and Production Support:* Farm Innovation Center led by CALS for the development, testing, and commercialization for new plant/agriculture technology.
- *Workforce Development:* Agriculture Education Program, incentives for young people to join the food and agriculture workforce, training for the use of new technology.
- *Business Development:* The Southern Tier Agriculture and Food Development Cooperative will help connect farmers to processing facilities and distribution networks to help increase the velocity of agricultural production, and will leverage new technologies to help increase the efficiency of farming in the region.
- *Capital:* Federal grants, Southern Tier Agricultural Economic Development Initiative, refueling the Rural Initiative Fund, private capital.

Private Investment

The food and agriculture initiative will achieve 5-to-1 private sector investment via:

- Private company investment in building facilities for food and agriculture production, processing, packaging, and distribution, food manufacturing and regional slaughterhouse/meatpacking.
- Private company job and wage growth in new production and distribution facilities.
- Private company job and wage growth in existing farms and facilities due to increases in production and distribution capacity.
- Contributions made by the educational institutions in the region, including Cornell University, the Cornell Cooperative Extension, Binghamton University, SUNY Broome, and Tompkins Cortland Community College. Educational investment will include payroll, federal grants that support scientists, and property.
- Financial Institution and bank programs that provide low-interest loans and revolving funds for food and agriculture projects. Examples of these programs include loans made by Tompkins County Area Development to support food entrepreneurs and the Dairy Revolving Fund in Chenango County.
- Federal funds to support food/agriculture facilities, workforce development, and renewable energy, including USDA investment in the certification of slaughterhouse/meatpacking facilities, Department of Energy investment in the development of renewable and clean energy resources, and Appalachian Regional Commission investment in commercialization and entrepreneurship related to the food bioeconomy.