Situation
We are seeing a shift in our food system and it is consumer-driven. Over the last decade, organic and/or local production for direct-market sales has become one of the fastest-growing segments of U.S. agriculture, with fresh produce being among the most popular organic categories. High tunnels are being rapidly adopted by organic and small-acreage producers in order to reduce losses by foliar disease, unexpected freeze/frost events, and abiotic stressors including: wind, excessive heat, and storm/hail damage. The addition of small-acreage produce growers to the U.S. production system involves in many cases first-generation growers who are resource-limited. Data from the 2014 Great Plains Growers Conference, a regional grower’s conference held near Kansas City, indicates that 83.9% of vegetable growers farm 1-10 acres and 53.9% have been growing for less than 5 years. Meanwhile 32.5% of growers in the region are growing organically and 64.8% of these producers are using high tunnels, and an additional 17.6% plan to get one. These small farms, farmers markets, CSAs, restaurant suppliers, and other such small businesses represent important opportunities for economic development in local communities across the U.S.

Public Value
Access to locally grown produce enhances quality of food available to Kansas citizens, reduces environmental impacts and protects local economies.

Outputs
Activities:
- Newsletters
- Social media
- Individual farm visits & consultations
- On-farm trials
- Research plots
- Workshops & meetings
- Field days and tours
- Training for county extension agents
- Online videos
- Webinars & online classes
- Growing Growers program

Participants:
- New or beginning fruit, vegetable, honey, or herb producers
- Established fruit, vegetable, honey, or herb producers
- New and established farmers markets
- New and established food hubs
- Local government officials
- Organic farmers
- Conventional farmers
- Growing Growers apprentices and farmer mentors
Short-Term (Knowledge)

- Producers learn about fertilizers, managing soil fertility, cover crops, and soil health.
- Producers learn to identify and manage weeds, insects, and diseases that impact their crops.
- Producers learn about different marketing opportunities and techniques to help them sell their produce.
- Producers learn business management and profit tracking skills.
- Producers learn effective methods for planning and scheduling their crop plantings.
- Producers learn about new methods and technologies for harvesting at their scale of production.
- Producers learn how to effectively handle their crops after harvest to ensure quality and food safety.
- Local government officials learn about the value and economic potential of local specialty crops.
- Producers learn about possible food safety hazards in their production systems and understand that they need to make every effort to avoid contamination.
- Producers learn about efficient methods and technologies for irrigating their crops.
- Producers learn effective techniques for extending their growing season and protecting their crops from weather extremes.
- Producers learn about the requirements of organic certification and labeling. Producers that wish to pursue certification have the information they need.
- Producers learn about potential new specialty crops and improved varieties.
- Producers learn about new production systems and technologies appropriate to their scale of production.
- Extension agents learn information and gain skills that allow them to work more effectively with producers.
- Commercial growers become aware of opportunities through KSRE including collaborative on-farm research, grower training opportunities, and educational materials.
- Staff and volunteers advocate or develop plans for increased access to high-quality, abundant and safe food (e.g., increasing local food production for food insecure persons, donations to food pantries, CSAs, electronic benefit transfer devices at Farmers Markets)

Indicators

- Did you learn about opportunities through KSRE to collaborate and gain more knowledge for your farm or business?
- Did you learn techniques to minimize the effects of weather extremes on your production systems?

Medium-Term (Behavior)

- Producers implement best management practices related to soil fertility and health.
- Producers correctly identify pest problems and manage them in efficient and safe ways when the problem reaches an economic threshold.
- Consumers purchase more locally produced specialty crops.
- Producers implement marketing, business management, and finance skills to increase their productivity.
- Producers implement effective crop planning and plant an appropriate variety of crops at the appropriate time of year.
- Producers implement harvesting, postharvest, and food safety practices that ensure crop quality.
- Local government officials enact policies that encourage local specialty crop production.
- Producers adopt GAPs and other practices to minimize the potential for contamination with microorganisms that cause foodborne illness.
- Producers use efficient and effective methods for irrigating their crops.
- Producers implement season extension techniques on their farms.
- Producers successfully complete organic certification if desire. Producers use the "organic" label appropriately.
- Producers plant new crops or improved varieties when appropriate.
- Producers implement new production systems and technologies appropriate to their scale of production.
- Extension agents work with and teach producers effectively.
- Producers interact with KSRE by conducting on-farm research and farmer training programs and providing knowledge to other growers.

Indicators

- Have you identified insect and disease problems and managed them in a timely fashion?
- Have you actively worked to improve the organic matter and fertility levels of your soil? What have you done?
- Have you experienced increased sales in direct marketing outlets? How much? Other marketing outlets?
- Have you implemented a new business management technique that has increased your productivity and efficiency?
- Are you implementing harvest/postharvest and food safety practices to ensure crop quality? Which practices?
- Have you planted new crops or new varieties? Which ones?
- Have you implemented new production systems, techniques, or technologies? How have these changes increased your productivity and yield?
- Have you shared your learning with other growers?

**Long-Term (Change in Condition)**

- Increased access to abundant, fresh, safe local foods, especially fruits and vegetables.
- Increase economic viability of local farms and horticulture enterprises through direct marketing that strengthens the local economy.
- Greater connection of consumers, especially urban consumers, with local agriculture results in stronger support for the needs of agriculture.
- Increased profitability of local specialty crop farms.
- Increased number of specialty crop farms and successful new farmers.
- Increased local jobs on local specialty crop farms.
- Farmers markets and other produce marketing options that meet the needs of both farmers and consumers.
- Development of infrastructure supporting local specialty crop producers increases the profitability of those producers and creates new local jobs.
- Increased safety of locally produced specialty crops.
- Community water resources are used wisely.

**Indicators**
- Have you increased the volume of produce that is available for sale from your farm?
- Have you increased your margins or otherwise seen an increase in profit?
- Have you developed relationships with your consumers?
- How many new specialty crop farms are there in the county?
- How many new jobs are available on specialty crop farms?
- Is locally grown produce available to consumers in a variety of locations and through different marketing channels? Has there been an increase in availability?