



COMMUNITY



4-H & YOUTH



ENVIRONMENT



AGRICULTURE



FOOD



The Cost of Produce Safety in Vermont

What GAPs certification means for Vermont produce farmers

Good Agricultural Practices, or GAPs, were developed in 1998 as voluntary guidelines for produce farmers to reduce the risk of microbial contamination related to food borne illnesses on their farms. Any farm is capable of following the practices - many of the practices are basic common sense and add little expense to a farm's operating costs. Most of Vermont's commercial produce growers are already following the many of the practices. However, after a dramatic increase in the number of food borne illness outbreaks associated with fresh produce beginning in the mid-2000's, some larger buyers, especially supermarkets, began requiring their vendors to be audited by a third party to certify that they were following Good Agricultural Practices. Today there are private third party GAPs Audits offered by private companies, as well as a USDA GAPs Audit. Buyers tell farmers which type of Audit they require so one farm may have to do multiple third party GAPs audits depending on the requirements of their buyers. In contrast to simply following the practices, in order to pass an audit and be certified, most farms usually must invest in some new equipment and infrastructure. As the certification must be renewed each year, farms must cover the cost of the audit, tests (such as water tests) and additional labor associated with the record-keeping required by the audit, every year.

The USDA GAPs Audit consists of seven sections: General, Farm Review, Field Harvest and Field Packing Activities, House Packing, Storage and Transportation, Wholesale Distribution Centers, and Security. Each section is composed of 15 to 30 questions pertaining to food safety practices which are scored on a point basis. A farm must earn 80% of the points in each section to pass the audit and be certified. Buyers tell their vendors which sections they require.

Because GAPs certification programs were initially designed for large-scale farms producing a few commodity crops for wholesale markets, they can be more challenging for small, diversified farms selling to multiple markets and farms that are open to the public. Because of economies of scale, small and mid-sized farms are at a disadvantage in that small farms must follow the same practices and bear the same costs as large farms, yet they have less capital and human capacity available to do so. The costs associated with GAPs certification can pose an additional investment hurdle for beginning farmers, dairy farms transitioning to produce, or other farms with limited or aging infrastructure. Thus, GAPs certification presents a new challenge to Vermont's local food system as farms weigh the choice between the opportunity to sell to a buyer that requires GAPs certification versus the expense of certification.

Who is affected

Currently GAPs certification is required by Hannafords, Price Chopper, Red Tomato and J.P. Sullivan, but other buyers of Vermont produce have indicated that they are considering requiring certification in the future. Of the 31 farms selling to Hannafords in 2010, five were large (doing over \$500,000 in gross sales, but the majority were small (11) to mid-sized (15) operations. In the future, all of Vermont's produce farms and farmstands that do over \$500,000 in gross sales will be subject to new FDA regulations for produce ("Preventive Controls"). Irrespective of federal and state regulations, food safety and produce industry experts predict that buyers will increasingly require some type of food safety assurance or certification from vendors in the future regardless of farm size.

Why a capital improvement program is important

Grants to help all farms (not just those seeking GAPs certification) improve their equipment and infrastructure will 1) help Vermont's produce farms keep or expand to markets requiring GAPs certification; 2) help small and mid-sized farms grow to the next level to reach markets requiring food safety assurances; 3) protect the Vermont brand by helping all farms make important equipment and infrastructure improvements that will improve food safety and product quality.

Typical Potential Basic Costs for GAPs Certification: All farms will incur annual costs associated with certification. But because every farm is unique, the costs associated with audit fees, record-keeping, equipment and infrastructure will vary from farm to farm. The costs in the chart below include those items that most farms need to have in place to pass certification, total costs will vary depending on the number of acres in production. Some farms will have additional costs above and beyond these items listed below.

POTENTIAL CAPITAL COSTS ASSOCIATED WITH PRODUCE SAFETY & GAPs CERTIFICATION	APPROXIMATE COST PER UNIT
GENERAL SECTION	
Traceability system (labels and gun)	\$200-500
UV filter on well (if does not pass VT State standards)	\$900
Mobile handwash station (if nearby sink not available)	\$500
Port-a-john rental (if fields over ¼ mile from bathroom)	\$100/month
Power washer (to wash and/or sanitize equipment)	\$500 - \$1,000
Signage (employees and visitor procedures)	\$50-200
FARM REVIEW	
Wildlife fencing (if wildlife pressure is high)	\$2-10 per linear foot
Compost thermometer (to monitor heat of piles)	\$50-100
Compost cover (to prevent recontamination or run-off)	\$350/square ft
Drip irrigation system (if irrigating with surface water)	\$500 – 1,200 per acre
Plastic mulch/row cover	\$275 – 970 per acre
FIELD HARVEST AND PACKING	
Washable plastic harvest baskets	\$7 –10/basket
Washable large harvest bins	\$100 – 200/bin
Hoses, tanks, sanitizers, monitors, etc.. for washing	\$200 – 1,000 per system
HOUSE PACKING	
Structural improvements (enclose shed, improve drainage)	\$1,000 - 30,000
Stainless steel sinks, tables (washable contact surfaces)	\$500 – 2,000
Wash water sanitizing and monitoring system	\$500 – 1,000 per system
FRP panels (washable material for cooler walls)	\$33—45 per 4x8 panel
Light covers (to protect against breakage)	\$1-5 each per light
Plastic strips (to protect work areas from birds, insects)	\$500 – 1,000 per door
Plastic washable packing containers	\$16 – 20 each
Waste management (sealed canisters, bins, etc..)	\$15 – 100 each
Rodent control	\$12 per trap

Annual costs: Include auditor fees, water quality tests, port-a-john rental fees, and labor associated with recordkeeping.

Audit Fees: Depending on the length of an operation’s growing season, 2-3 Audits are conducted each year. Audit fees for VT farmers are ranging \$207 - \$947 at an average of \$638 per audit now for one crop and the first three sections of the USDA Audit and 1 crop. Fees will increase with additional crops and sections of the audit.

Labor: Time spent on record keeping ranges between 17 and 830 hours per year with the average amount of labor for the first year of certification coming out to 322 hours. Common tasks the first year include: writing the food safety plan, implementing a traceability system, and keeping regular hygiene and sanitation records.

Equipment and Infrastructure Expenses will vary greatly by farm. The list to the left does not include the numerous small items such as hand sanitizer, record books, etc... which add up quickly. The average cost for small farms to pass just the first three sections of the USDA Audit (General, Farm Review and Field Harvest) is running \$1,000 –\$ 5,000. Costs increase substantially if the packshed is audited.

UVM Center for Sustainable Agriculture



Ginger Nickerson, GAPs Outreach Coordinator, and Florence Becot, UVM Department of Community Development and Applied Economic Master’s Program.

July 2011. Center for Sustainable Agriculture, University of Vermont, 106 High Point Ctr, Suite 300, Colchester, VT 05446 <http://www.uvm.edu/~susagctr/>

UVM Extension helps individuals and communities put research-based knowledge to work. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. University of Vermont Extension, Vermont. University of Vermont Extension, and U.S. Department of Agriculture, cooperating, offer education and employment to everyone without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or familial status.