HACCP FEASIBILITY – 2009

SALAD GREENS MARKET STUDY

RESEARCH RATIONALE

HACCP or Hazard Analysis Critical Control Point plans, a standardized set of preventative food safety standards, are becoming more important to produce growers and vendors. Historically applied to processed or hazardous food products, HACCP plans for salad greens are now required by a growing number of restaurants, retail and institutional buyers, and distributors across the country in response to industry and consumer demand for increased food safety precautions. We anticipate that the trend towards formalized food safety practices for ready-to-eat greens, including GAP, GMPs, SSOPs, and HACCP will continue as calls for increased food safety proliferate with the intermittent waves of pathogen outbreaks.

If industry standards continue to tighten at all levels, Massachusetts farmers will not be able to expand to meet the demand for fresh salad greens from grocery stores and commercial cafeterias without food safety growing and handling procedures such as GAPs, GMPs and HACCP in place.

While improving safe handling practices of fresh produce from field to supermarket or dining hall is a laudable strategy, the practices come at a cost. Many smaller farmers may not be able to implement current food-safety programs, which are designed for large processing facilities that aggregate product from many industrially-scaled farms, profitably. Developing HACCP plans and meeting prerequisite standards on the farm will require facility upgrades and training of farm managers and staff, both of which require significant investments of time and money. Farmers that implement HACCP plans must be able to sell enough salad greens at a price point that reflects the enhanced safety precautions used during handling and packaging to make the improved practices worthwhile.

Objectives

The goal of this targeted market study was to determine the **wholesale market potential** for locally grown and packed salad greens. At the same time we wanted to assess whether requiring food safety measures designed for industrial food production is becoming a **trend** that would be increasingly applied to farmers in our region. The studies' findings could **illustrate the potential impacts** of these practices on the competitiveness of local growers as they pursue expansion and larger markets interested in locally-sourced products.

Audience

This data will inform local farmers' decisions about whether implementing formalized food safety practices would enhance their competitiveness for wholesale accounts, and whether there is sufficient demand for their product to change their growing and packing practices to accommodate the extensive protocol requirements of these plans.

METHODS

how?

Information was collected through in-person interviews and telephone conversations with a select sample of produce buyers and managers at local retailers and institutions. The interviewees were chosen based on the volume of their purchases and proven interest in purchasing locally grown produce, so as to represent the target market for salad greens growers in the Pioneer Valley. We also chose to primarily survey buyers who have some level of familiarity with CISA and local growers so that we can continue to develop those relationships and exchange information more frequently and openly.

what?

The first section of the survey was designed to gather quantitative data on demand for wholesale salad greens. The remainder of the survey collected qualitative data on buying practices of local institutions and retailers and the atmosphere concerning food safety protocols in the wholesale market.

who?

We targeted produce department managers and food service directors as our direct contacts because we estimated that they would be most familiar with price points and volume of demand, and exposed to consumer demands related to food safety. We took this approach knowing that we might not gain insights on the corporate decision-making process that often leads to food safety requirements for internal business reasons such as branding and liability.

The following businesses were surveyed, to varying degrees, as part of this study:

Retailers

- Atkins Country Market, Amherst
- Big Y World Class Markets, Corporate
- Foster's Supermarket, Greenfield
- Franklin Community Cooperative Market, Greenfield & Shelburne
- Maple Farm Foods, Hadley
- River Valley Market Co-op, Northampton
- Stop & Shop Supermarket, Agawam
- Whole Foods Market, Hadley

Institutions

- Amherst College, Amherst
- Mount Holyoke College, South Hadley
- University of Massachusetts, Amherst
- Baystate Health Systems, Greenfield & Springfield
- Rockridge Retirement Community, Northampton

Please note that we did not have 100% participation for every part of the survey. Also, we chose not to pursue restaurants because most informal reports from farmers suggested that they had not experienced significant changes in restaurant purchasing behavior following recent food safety scares. However, this study could be enhanced through interviews with local and regional distributors as they often hear firsthand the demands of wholesale buyers and industry trends.

FINDINGS

MARKETS – CURRENT CONDITIONS AND OPPORTUNITIES

CISA's survey aimed to determine market conditions for salad greens within a buyer network that was potentially interested in locally-sourced products. This information can help identify potential market opportunities for local growers.

Price

- Retailers surveyed currently pay an average of $2.15/$3.18 per pound of loose salad greens (conventional/organic) and $3.51/$4.81 per pound of bagged salad mix (conventional/organic). There is a significant difference in price between the independent food retailers (with prices up to $7.00/lb) and other respondents.

Volume

- The eight retailers we surveyed currently purchase 506 pounds (bulk) and 197 pounds (bagged) of salad mix total every week throughout the Massachusetts growing season
- The 5 institutions we surveyed purchase 1,940 pounds (bulk, no organic) and 409 pounds (bagged) of salad mix every week throughout the Massachusetts growing season.

Table 1. Pounds of Salad Greens Purchased Per Week Between May and October

		Bulk/ Conventional	Bulk/ Organic	Bagged/ Conventional	Bagged/ Organic
Retailers	8	275	231	116	81
Institutions	5	1,940	0	406	3

Market for Local Products

Respondents expressed a strong demand for local products, however we did not verify actual local purchasing as part of this study, so claims of current local purchasing may be inflated since buyers could have been biased by CISA's mission. One purchaser mentioned that although a Northeastern brand of salad greens was popular this year, the local customers are very discerning about where their food comes from, and would likely prefer salad greens from the Valley.

- 38% of retailers and 20% of institutions currently buy Massachusetts-grown salad greens.
- *Pricing -*

Retailers who buy local salad greens pay on average 19% more for local products across all categories (bulk, bagged, conventional, organic). One retailer is willing to pay 70% more for bulk organic greens and 30% more for bagged organic greens that are local (and that meet their food safety requirements) than they do for national brands, because customer interest in locally grown products is high.

Institutions are willing to pay on average 11% more for local salad greens than for nationally distributed products[1]. Industrial salad greens companies, however, have lowered the prices on their products through vertical integration. Local growers are not competitive, especially in the price ranges sought by institutions looking for large volumes of product. Special events or small institutions might provide a market niche for local growers.

- *Market Penetration* - These retailers buy on average 60% of their salad greens from local sources during the growing season (May through October) averaging 46 lbs/week.
- *Potential* - 100% of respondents were interested in more locally-grown salad greens. The only hesitation was expressed by a retailer who already sources most of their greens locally. Large institutions and conventional chain stores were more conservative in their goals about what percentage of demand they would seek to fulfill locally (10-70%), due to their large volume requirements and need for consistency.
- On average, respondents' goal for local purchasing of salad greens was to fulfill 81% of their total demand for greens.
- If the surveyed buyers were to fulfill their local purchasing goals it would mean 1,922 more pounds of local greens/week sold to 8 buyers in the MA growing season (May-Oct) and 667 sold to 7 buyers in the winter, equaling annual gross sales of $230,000 (at an average $3.41/lb) in **additional revenue** for Massachusetts farmers.

Characteristics of Demand for Local Products

- Desired marketing attributes – 62% of respondents look for organic products, 54% look for family farm, 31% Certified Naturally Grown, 23% farm-specific branding.
- The barriers faced by buyers in procuring local products such as salad greens include: regularity of supply (100%), seasonality, price, quality (77%), and volume and processing standards (62%).
- The barriers faced by local farms for securing accounts include buyer requirements, such as: insurance, food safety certifications or quality assurance programs, shipping and packing standards, and inspections.

FOOD SAFETY PREFERENCES

According to our survey results, food safety certifications are most often required by large institutions and large chains, and less so for independent stores. Most retailers noted that food safety is a growing concern in the industry for salad greens, or for their

[1] *Institutions & Distributors* - Many of the larger institutions purchase locally grown products primarily, and in some cases solely, through distributors. Few larger purchasers are willing to take on an additional account to buy a single product directly from the farmer. Growers who are interested in this type of market should check into distributors' requirements and price points. Target prices set by distributors are unlikely to match viable prices for farmers, making many larger institutional markets unavailable to local growers.

industry overall, but it is not a strong concern for their consumers, except for periods right after outbreaks and recalls.

Institutions are willing to pay 11% more, on average, for local salad greens with approved food safety audits. However, starting prices hover around $1.60/lb. for bulk conventional salad greens, a low price for any local farmer growing small to moderate quantities.

Convenience of Food Safety Policies

Survey participants told us that standardized measures and protocols help them avoid being involved in the minutia of evaluating practices related to food safety, and improves the liability stance of the company and their own personal sense of responsibility. Several institutions mentioned that the reason why they want food safety certification is because it covers all of the risks, so that instead of having to ask several questions of the farmer, they can rest easy knowing someone else has already covered it (i.e. where it was grown, when it was picked, how it was packed, temperatures, etc.). In some cases, food safety audits provide them with a stand-in for a quality control program on farms.

Institution quotes:

> "Temperature logs, cleaning, and documentation are important. I might go to look at the trucks and make sure it meets my satisfaction. But HACCP would cover all of that."
>
> "The certification carries slightly more weight with me personally, but I am not the only one to make the [purchasing] decision. It would help convince other people [in the department] that we should buy more locally if there was that security associated with the product. And they might be willing to pay more for it."

Many retailers make claims about requiring a certain level of food safety protocols for growers, but many of them are not directly involved with setting policy or enforcement, and if they are the standards are based on individual interpretation. Most produce managers either rely on corporate offices to set standards and contracts, or on distributors who outline their practices.

Chain of Command

Most of the produce buyers have limited knowledge of what exactly their company requires and how their policies are interpreted. In some cases they are not responsible for reviewing supplier credentials, and in other cases they use their own interpretation of corporate policy and have not been challenged.

Due Diligence & Alternate Protocols

Some level of due diligence or good farm/vendor reputation is important for most produce buyers, but there appears to be flexibility in the format. Several buyers outlined their recommendations without naming a particular protocol or certification (e.g. "paperwork", a recall policy, a visual inspection of trucks, etc.) and others expected that local, state, or federal policies were regulating production. One institutional representative noted: "GAPs may be sufficient. It would just be good to know that they (vendors) have crossed their t's and dotted their i's."

A number of purchasers mentioned that a **recall** policy/procedure is the most important component of food safety protocols to have in place. Having a document outlining the procedure would be very comforting to many purchasers.

Local Grower Exemptions

When asking if retailers and institutions require that growers meet any particular food safety standards, many claimed to have basic standards, but almost all mentioned that for one reason or another, local growers were temporarily or partially exempted from those requirements. We found three common types of responses:

1. We don't require it, because local growers are a different case.
   In the words of one institution representative: "With the local farmers, we know that it is a whole different scenario."
2. We do require it, but we haven't asked for verification yet even though we know we should. (institutions)
   As one institutional respondent put it: "With a local vendor, we are not going to make them give us paperwork, but with [our distributor] we do. When we get things from [our distributor] it is coming from California, and there a lot of things that can happen between there and here. I've never heard of anything [bad coming] from Hadley."
3. We do require it, therefore we don't currently buy salad greens from anyone local (chain retailers).
   One retailer that requires HACCP does not buy locally because of exclusivity contracts on salad greens SKUs, and another retailer does not current source local salad greens because local farmers do not comply with their corporate policy on HACCP and prerequisites.

Pricing

Food safety standards would be value-added to local salad greens, but many buyers noted that price sensitivity might limit their ability to pay more. As one institution put it: "Honestly, in this economy, I worry about paying more for things I can get cheaper somewhere else…We would have to pass on the cost to the consumer…Even though we both know the benefits of buying locally, the cost has to go somewhere."

End-Consumer Food Safety Demands

According to survey respondents, consumer demand does not appear to be contributing to this trend for requiring food safety protocols of vendors. All but one interviewee indicated that their customer base is not interested in food safety, except during times of food safety scares. During these times, some purchasers receive questions and comments from consumers about where their produce is coming from and if it is safe to eat.

As a result, food safety practices or certifications are not effective or useful tools for end-consumer marketing, and may only provide a competitive advantage if targeted to wholesale buyers.

RECOMMENDATIONS FOR GROWERS

This focused study has shown that there is significant potential demand for local salad greens, particularly those that are linked to some level of quality assurance or food safety programming, but that this demand is not necessarily the right fit in terms of scale and price for many local salad greens growers. As growers assess these potential markets, they will need to determine the price point and volume requirements as a baseline before pursuing on-farm improvements to comply with vendor requirements such as food safety protocols and audits.

Finding the Right Markets

Each farmer defines their own **target market** for themselves, matching volumes, price point, and other standards and business culture with their own business plan. We found that out of the buyers we interviewed, higher-paying independent retailers are less formal or top-down about vendor requirements and more likely to make judgments on knowing the farm and farm reputation. One large chain retailer could also be a good market for growers because of their interest in buying locally in western Massachusetts, but at the same time require third party audited HACCP plans and prerequisite programs such as GAPs, GMPs, and SSOPs – which could pose a significant barrier for many farms, unless they already have commercial kitchen-type facilities. Other chain retailers may have exclusivity agreements with national brands to acquire discounts or deal through distributors.

Institutional prices are impossibly low, and volumes immense – but interest in highlighting local and farmers may look into events or catering for specific niche markets.

Due Diligence

The findings of this study suggest that buyers are looking for some **assurances and documentation** of due diligence, but that for most buyers interviewed, there is still flexibility for what kinds of programs growers establish for their growing and packing operations. In most cases, third party audited HACCP is *not* required as part of vendor agreements. Buyers are open to hearing about the quality assurance and food safety systems on the farm, preferably in line with familiar or standardized programs such as GAPs or basic tracking systems with pack or expiration dates linked to harvest logs. Most likely they will not want to know all the details, but want to be assured that all the details are covered.

Getting Familiar with HACCP

It is a good idea for growers to read up on the basics of HACCP. This will provide a basic understanding of hazard analysis and strategies, allowing growers to monitor changes in industry standards, respond in an informed manner, assess available tools, and propose practical alternatives. CISA has materials and templates that growers can use to develop their own draft plans. Contact us for more information.

Educating Buyers & Evolving Requirements

There appears to be a good bit of confusion in most stores, with each buyer trying to figure out what's happening, how to interpret corporate policy, get up to speed with new federal requirements such as COOL (County of Origin Labeling). In some instances, buyers may respond favorably to informed presentations from growers about their food safety practices, even if these practices do not meet formal, audited standards. Food safety standards and requirements are evolving rapidly, but right now there is room for farmers to offer a variety of food safety approaches and offer some **farm-friendly strategies** or solutions to buyers.