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# **Evaluating Marketing Channel Options for Small-Scale Fruit and Vegetable Producers: Case Study Evidence from Central New York**

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# **Evaluating Marketing Channel Options for Small-Scale Fruit and Vegetable Producers: Case Study Evidence from Central New York**

M.N. LeRoux, T.M. Schmit, M. Roth, and D.H. Streeter\*

## **Abstract**

An investigation of the relative costs and benefits of marketing channels used by typical small-scale diversified vegetable crop producers is conducted. Using case study evidence from four small farms in Central New York, this study compares the performance of wholesale and direct marketing channels, including how the factors of risk, owner and paid labor, price, lifestyle preferences, and sales volume interact to impact optimal market channel selection. Given the highly perishable nature of the crops grown, along with the risks and potential sales volume of particular channels, a combination of different marketing channels is needed to maximize overall firm performance. Accordingly, a ranking system is developed to summarize the major firm-specific factors across channels and to prioritize those channels with the greatest opportunity for success based on individual firm preferences.

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# Evaluating Marketing Channel Options for Small-Scale Fruit and Vegetable Producers: Case Study Evidence from Central New York

## Introduction

Current food shopping trends indicate an increasing demand for “local” foods. This new demand is pulling food through marketing channels and presenting new marketing opportunities for small scale agricultural producers. This study is an investigation of the relative costs and benefits of various marketing channels used by typical small-scale diversified vegetable crop producers in the Ithaca, NY area. We compare the performance of wholesale and direct marketing channels, including how the factors of risk, owner and hired labor, price, lifestyle preferences, and sales volume interact to impact profitability across different channels.

Case studies of four successful farms that sell through a variety of marketing channels were prepared to get a “snapshot” of the costs and returns associated with marketing their crops. An overview of the four case study farms is featured in Table 1.

The goal for this project was not to create a comprehensive economic analysis of each case study farm, but rather to compare the experiences of four farms operating at the same scale with various marketing channels. All of the farms that were chosen have been in operation for over five years, and have between 15 and 20 acres in diverse vegetable and small fruit production.

## Methodology

Labor data for specific marketing activities was collected from each farm, as well as miles traveled and gross sales. Each tracked item was categorized by marketing channel in order to assess the costs and returns of each channel. Primary analysis of each channel was based on this data; however, additional survey data were collected to assess channel-specific risks.

**Table 1. Case study farm comparison and marketing channels utilized.**

| Characteristics        | Mandeville Farm | Remembrance Farm | Stick and Stone Farm | Silver Queen Farm |
|------------------------|-----------------|------------------|----------------------|-------------------|
| Acres in Production    | 18              | 18               | 18                   | 20                |
| Number of crops grown: |                 |                  |                      |                   |
| Vegetables             | 18              | 13               | 19                   | 8                 |
| Fruits                 | 5               | 0                | 2                    | 9                 |
| Total                  | 23              | 13               | 21                   | 17                |
| Organic / Conventional | Conventional    | Organic          | Organic              | Conventional      |
| Direct Channels:       |                 |                  |                      |                   |
| CSA <sup>a</sup>       |                 | X                | X                    |                   |
| Farmers' Market        | X               |                  | X                    | X                 |
| Farm Stand             | X               |                  |                      | X                 |
| U-Pick                 |                 |                  |                      | X                 |
| Wholesale Channels:    |                 |                  |                      |                   |
| Restaurant             |                 | X                | X                    |                   |
| Retail / Grocery       | X               | X                | X                    | X                 |
| Distributor            |                 | X                | X                    |                   |

<sup>a</sup> CSA = Community Supported Agriculture

### Labor Data

Through informal interviews and a review of the literature, it was clear that, regardless of channel, the major marketing cost for each farm would be labor. While each channel has additional associated costs such as packaging materials and market fees, labor is by far the largest cost regardless of channel.

Farmers typically do not value their own labor in profitability calculations, or “pay” themselves an hourly rate. While this is common among small business owners as a whole, it means the marginal cost of own time is counted as \$0/hour and results in understating total costs. This practice is particularly problematic because labor costs, including owner-operator labor, when assigned a value, have the biggest impact on profitability across channels.

During one week of the study (August 4-10, 2008), the owner(s) and employees of each farm kept simple daily activity logs. Logs were completed by all farm staff, including owners, hired staff, unpaid family members, and volunteers. The logs allow assessment of how labor is devoted to various marketing activities during a typical peak-season week. Figure 1 is a sample of the activity log along with the instructions given to farmers and their staff. By comparison to other weeks, this week was very typical and representative of the farm averages.

When the week of data collection ended, the completed labor logs were assembled and the data were entered into MS Excel for analysis. Once compiled, the resulting data were reviewed and verified by the farm owners to be an accurate account. Additionally, gross sales data from the week and each employee’s pay rate were collected (this study assumes no overtime pay).

Name and date are important. Fill out as many sheets in a day as it takes to document each distinct activity.

I am only really interested in activities that occur from harvest on. I do not need any record of production activities.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Time spent (to nearest 15 min): \_\_\_\_\_ Vegetable(s): \_\_\_\_\_

Activity: Check all that apply

☐ Harvest ☐ Cull/grade/sort/wash ☐ Bunch/Bag/Package ☐ Pack orders/boxes

☐ Bookkeeping/Bills ☐ Travel to market ☐ Deliveries ☐ Sales calls

☐ Other (please describe) \_\_\_\_\_

Product Destination: Check all that apply (for bottom row, please write name of biz)

☐ CSA ☐ Farmers' Market ☐ Farm Stand ☐ Other \_\_\_\_\_

☐ Grocery Store ☐ Restaurant ☐ Distributor \_\_\_\_\_

You will know where the product is destined. If you are handling something that is going to more than one place, check more and I will find out what is going where from the manager's records.

Please write the name of the specific store, restaurant, or distributor if known.

Check one or two activities depending on what you were doing. Just see how time and activities are naturally divided up during the day.

Figure 1. Instruction sheet for the labor log filled out on farms.

### *Interviews and Survey Data*

To get a better sense of the farm production and marketing operations, multiple interviews were conducted with the farm owners and employees. In addition, a survey was conducted among fourteen Ithaca-area diversified fruit and vegetable growers to gain a more complete understanding of farmers' perceptions regarding marketing channel risks. This information proved particularly valuable when interpreting the analytical results and implications for grower marketing strategies.

### *Case Study Assumptions*

For ease of exposition and to protect farmers' confidentiality, all quantitative data collected are presented as aggregate averages, percentages, or ratios. Profitability, when discussed in this report, is defined as gross sales minus the cost of harvest and marketing labor and mileage. Costs such as building and equipment depreciation, land costs, production costs, and opportunity costs are not included. Labor and mileage are the only costs tracked in this study. Wholesale prices received by farmers in this study are prices for goods delivered by the farm.

Only labor activities from harvest to market were tracked; production activities are expected to be the same across channels and were therefore excluded. However, harvest activities are included because it was determined through interviews with the participating farms that harvest activities vary depending on the marketing channel destination so it was important to capture these differences. The average hourly rate paid to hired staff by the participating farms was \$8.46/hour. For this reason, all volunteer, family member and owners' time was given a conservative value of \$8.50 per hour in the calculations that follow.

For the CSA marketing channel, farms are paid at the beginning of the growing season in exchange for a weekly share of produce, which made the week's gross sales value difficult to assess. Keeping this system in mind, the study relied on values assigned by the farmer for produce marketed through CSAs and was the same as or similar to the farms' wholesale price.

Sales and cost values for the u-pick channel represent just one farm since only one of the four farms offered u-pick. For the purposes of investigating the costs and labor needs of any other staffed direct marketing channel, the u-pick channel as depicted in this study is a good representation. Additionally, the farm stand channel, as represented in this study, is only represented by one farm, and operates un-staffed with an honor system for payment. As a result, the figures for this channel can be used effectively as a base for exploring profitability for an un-staffed direct marketing channel.

One limitation of the study is the short period of data collection due to challenges getting the respondents to complete the data forms. Farmers cited that they were too busy with production, harvest, and marketing at this time of year as the reason for not completing the sheets. In addition, some participating farmers forgot to fill out their daily activity logs and then tried to reconstruct them afterwards. This may have led to inaccurate data and underreporting of labor hours. When errors were evident, interviews were conducted to reconstruct the missing or confused data as accurately as possible.

## Marketing Channels

For the purposes of this study marketing channels are divided into two groups, wholesale and direct. Wholesale marketing channels are defined as those channels for which sales are to a buyer who is not the ultimate end user. In contrast, direct marketing channels are defined as those channels for which sales are made directly to the end user.

Wholesale channels typically require the ability to move large quantities of produce quickly and usually (but not always), at a lower price than through direct channels. Wholesale marketing channels include selling to restaurants, grocery, and other retailers (without the use of a broker or distributor), distributors, produce auctions, processors, and produce brokers. In this study, wholesale also includes selling to other farm stands. There are no farms in the case study that sell at auctions, to processors or produce brokers.

While direct channels often feature higher prices as compared to wholesale, they also require more producer-customer interaction, and additional time and skills requirements of the producer. Direct marketing channels include: CSA, farm stand, farmers' market, and u-pick (also called "pick-your-own"). Although farmers are inconsistent in their use of terms and sometimes refer to "direct to restaurant" or retailer, for the purposes of this study both retail and restaurant sales are considered wholesale.

Direct marketing channels generally offer higher prices, but consume small quantities of goods. Farmers are faced with a dilemma: they can move large volumes of produce through wholesalers at relatively lower prices or seek higher prices in direct markets and run the risk of unsold leftovers. Figure 2 is an illustration of this spectrum and shows why decision making is oftentimes difficult for the farmer.



**Figure 2. General price and volume relationships between wholesale and direct marketing channels.**

## Primary Steps in Small Farm Marketing

Small farm marketing can generally be divided into four steps: (i) harvest, (ii) process and pack, (iii) travel and delivery, and (iv) sales time. We describe these steps in more detail below, highlighting differences within these steps across market channels.

### *Harvest*

Harvesting is the process of gathering saleable produce from the fields. Harvesting a diverse group of vegetables is time consuming and is one of the most time intensive activities for farms



that do not use mechanical harvesting. All harvesting on the participating farms was done by hand, except for green beans at Mandeville Farm which were harvested by machine.

The amount of labor devoted to harvest varies depending on the marketing channel destination for the crop. In the discussion of specific examples, it is important to understand that some crops can be harvested in different ways, depending on the market. For example, bunching beets with a rubber band or twist tie in the field, which might be needed for one channel, is more time consuming than harvesting “loose” beets which might be acceptable for another channel. In general, harvesting a crop for wholesale marketing channels requires more labor.

### *Processing and Packing*

For the purposes of this study, the “process and pack” activities include: culling, grading, sorting, washing, bagging, packaging, and packing orders and boxes. Processing produce, like harvesting, varies depending on the marketing channel. Processing time for direct marketing channels such as farmers’ market and CSA can be considerably lower than for wholesale channels.

Produce destined for wholesale buyers such as restaurants, distributors, and retailers requires a higher degree of washing, culling, grading, and packaging than does the same produce destined for direct sales. In particular, wholesale customers demand produce of consistent size, while farmers report that direct marketing customers are satisfied with irregularly shaped and sized produce. Based on first-hand experience and interviews, we find that customers at farmers’ markets prefer more variety in sizes of vegetables.

Selling through both direct and wholesale channels can be an effective way to have a ready market for all produce, with the best and most uniform going to the wholesale customers and the rest sold directly through farmers’ markets or farm stands.

### *Travel and Delivery*

The next step in marketing is transportation, except for u-pick, roadside farm stands located at the farm, and most CSAs. For this study, transport time includes travel to and from farmers’ markets, satellite farm stands, and deliveries to restaurants, grocery stores and distributors. Also included is time spent loading and unloading the truck and talking with customers at the delivery site. Grocery stores, restaurants and most distributors require delivery. Additionally, while most Ithaca-area CSAs have a member pick-up day at their farm, customers can also pick up at one additional location, such as a farmers’ market. Some CSAs also offer delivery for an extra fee.

### *Sales*

Sales time is an important factor that should not be underestimated when selecting a marketing channel. For our purposes, sales time includes “face time” with customers, time spent invoicing, making sales calls, creating daily harvest sheets or price lists, and doing other administrative tasks. Farmers must weigh their preferences for “face time” when choosing where to market their crops. Direct channels are more sales time intensive than wholesale channels, with the exception of honor system farm stands and u-pick.

Direct sales channels require a high level of customer service and a positive, friendly attitude; however, they generally provide producers with valuable customer feedback on buying preferences and price sensitivity. Some farmers enjoy interacting with consumers and consider selling in the direct channels a rewarding community event and an opportunity to build their farm's "brand". While some view customer interaction as a bonus, not everyone is skilled at interfacing with customers in this way and some farmers see direct sales as a distraction from the "real" business of farming: production and harvest.

Time intensive direct market channels such as the farmers' market can reap other rewards such as leading to new wholesale, farm stand, and u-pick customers, which are hard to measure. In fact, some farmers view the farmers' market as a form of advertising for their other, higher profit marketing methods. Additionally, chefs and wholesale buyers may discover a farm at farmers' market and begin wholesale purchasing. Exposure at a popular farmers' market can build a farm's reputation and familiarize customers with the farm name.

### **Market Channel Characteristics**

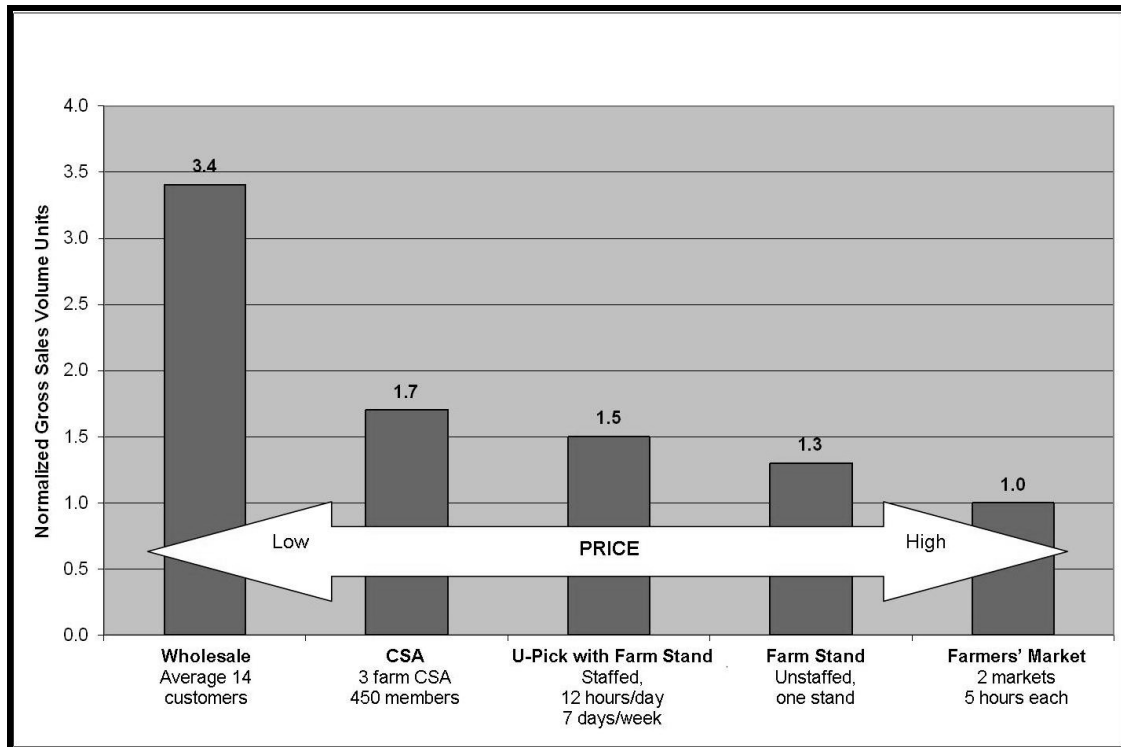
Data collected from the farms allow analysis of each channel's performance in regard to sales volume, profit, labor requirements, and risk.

#### *Sales Volume*

The volume that can be sold through a given channel has a large impact on profitability. The more perishable the crop, the more important it is to have a channel that can absorb the volume harvested as quickly as possible. As such, risk and volume are closely associated. Farmers are challenged to balance the lean and the plenty when selling through different channels. As one farmer described, the constant challenge is finding an outlet for the varying and sometimes unexpected harvest volumes, "I am not going to pick it unless it is sold." While that may mean letting a crop spoil in the field, spoilage is less expensive than paying to harvest something that may not sell.

Optimizing sales of perishable crops requires the flexibility of combining different channels capable of absorbing unpredictable volumes. In general, wholesale distributors and retailers can be counted on to buy large quantities at once. Also, through direct marketing, CSAs can consume a large volume. With a CSA, it is always possible to give members more in their share if a particular crop is plentiful, but this does not translate into more income, just less wasted produce.

The total volumes sold by the case study farms during the studied week illustrate the relative volume capacity of each marketing channel. In Figure 3, the volumes sold for each channel were derived from the group's total gross sales for the week and normalized to protect each farm's confidentiality. The values for each channel were calibrated to the group's weekly average, where each value represents the relative volume of sales compared to farmers' market sales. The figure shows that wholesale channels, with a group average of 14 wholesale customers each week, are able to purchase the largest volumes, roughly 3.4 times as much (in value) as farmers' markets. The average farmers' market sales volume was the lowest across all channels. Notice also the relationship of price and volume as discussed previously.

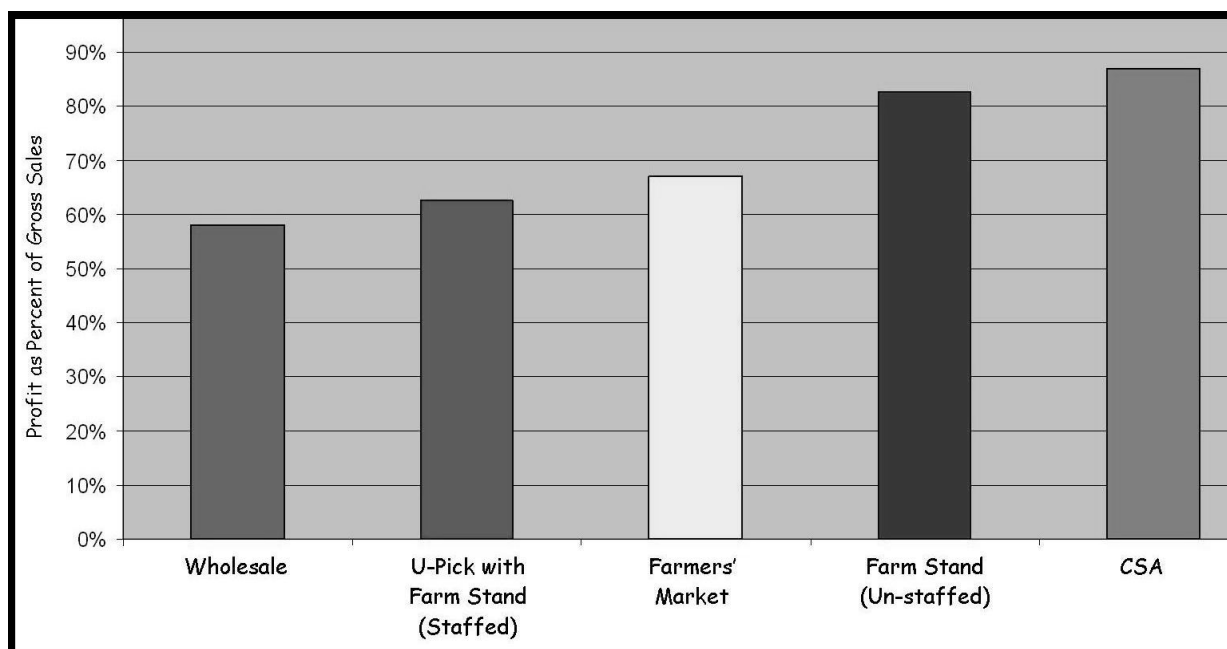


**Figure 3: Comparison of dollar volume sold by marketing channel (1 week, peak season).**

The general tradeoff between relatively high- and low-volume marketing channels is price. However, despite lower prices, high volume channels offer the benefit of increased efficiency in the harvest and production process. Additionally, wholesale buyers can make large purchases in a very short time. For our case study farms, wholesale was the highest dollar volume channel, even though it offered the lowest price to farmers (Figure 3). CSA, the next highest volume, offered the same as or slightly higher prices than wholesale outlets. U -pick, the third highest volume marketing channel, also offers a relatively low price compared with other direct marketing channels.

### *Profits*

While sales volumes are important, including the cost side of the equation is necessary in evaluating channel performance. From our case study farms, we compute the average profit percentages by market channel, calculated as net returns relative to gross sales (i.e., gross sales less marketing labor and mileage costs, then divided by gross sales). This metric then focuses attention on prices received relative to labor costs. In this case, CSA was showing to have the highest profitability percentage, followed closely by the unstaffed farm stand. As expected, per dollar of gross sales, the profitability of the wholesale channels was the lowest. Furthermore, this highlights the trade-off in volume versus unit profits, and both need to be considered in making marketing channel choices.



**Figure 4: Group average percent profit per dollar of gross sales.**

### *Risks and Lifestyle Preferences*

In addition to the normal production risks of weather and pests, each marketing channel offers a set of risks to the producer.<sup>1</sup> Marketing risk comes in many forms, including market demand for a crop, price, competitors, failure to offer a diverse selection, and low volume sales. Additional risks include the possibility of low customer turnout, such as at farmers' markets, farm stands, or u-pick businesses resulting in unsold perishable products. Risks for any channel that allows customers on the farm are injuries, crop damage, litter, and other problems.

In a survey conducted with Ithaca-area vegetable farms, farmers were asked what they felt were the primary risks with each channel. The responses are categorized into seven basic challenges: low volume sales, high labor and marketing costs, the ability to provide product of consistent quantity and quality, buyer failure to fulfill commitments, competition, unpredictable customer turnout, and low price risk. Table 2 illustrates the frequency that each challenge was mentioned.

The results show that fear of low sales volume was an issue with the restaurant channel and most often for farmers' market (Table 2). For CSA, the concern was about leftover produce. Interviewed farmers find that approximately 20% of produce harvested and brought to a farmers' market goes unsold. That produce is often donated to a charity, sold to other channels at a discount, bartered for other goods, or composted. Low prices are a risk created by competition from other farms as well as other channels, and can also be the result of a market flooded with a certain item.

<sup>1</sup> The discussion of risk is directed by the results of a survey of 14 Ithaca-area small scale vegetable growers, informal interviews, and a literature review. When asked an open-ended question about risks, respondents did not adhere to the strict meaning of "economic risk," but rather listed drawbacks and challenges in addition to risks.

**Table 2. Risks and challenges associated with marketing channels as cited by Ithaca-area surveyed farmers. (N=14).**

|  | CSA                         | U-Pick                                | Farm Stand          | Farmers' Market | Restaurant | Distributor         | Grocery   |
|--|-----------------------------|---------------------------------------|---------------------|-----------------|------------|---------------------|---|
| Low sales volume, leftovers, unsold produce.                     | X                           |                                       |                     | XXX             | X          |                     |   |
| High level of labor and other marketing costs needed.            |                             |                                       | XXX                 | XXXXXX<br>XX    | XX         | XXXXXX              | XX  |
| Ability to provide consistent quality & quantity. (crop failure) | XX                          | X                                     |                     | XX              | XX         | X                   | XX  |
| Competition in the market.                                       |                             |                                       |                     | X               |            |                     | X   |
| Unpredictable customer turn out.                                 |                             | XX                                    | XX                  | XX              |            |                     |   |
| Low prices, low profits  |                             |                                       |                     |                 |            | XXXX                | X   |
| Buyer back out. Buyer failure to fulfill commitments.            |                             |                                       |                     |                 | X          | X                   | X   |
| Other (1 mention each)   | Need to grow diverse crops. | People on the farm, aging population. | People on the farm. |                 |            | Inconsistent orders | Inconsistent orders, lack of control of display |

X = one mention

failure with wholesale channels due to the commitments they have with buyers. Farmers were also concerned about wholesale customers backing out of orders. Buyer back out can occur when the buyer's needs change suddenly, if they refuse produce due to poor quality, or if they turn to another supplier.

The two main reasons given for avoiding a particular marketing channel amongst the case study farms were lifestyle preferences and stress aversion. Wholesale channels tend to create stress because they require higher levels of preparation (e.g., washing, grading, packing, and delivery), product specifications, and volume and commitments. Distributors were also perceived to be very demanding, where producers must accept dictated prices, deadlines, and delivery logistics. Alternatively, direct marketing channels were perceived as relatively low stress. This was particularly mentioned with the CSA channel that may have lower expectations in terms of processing and packaging.

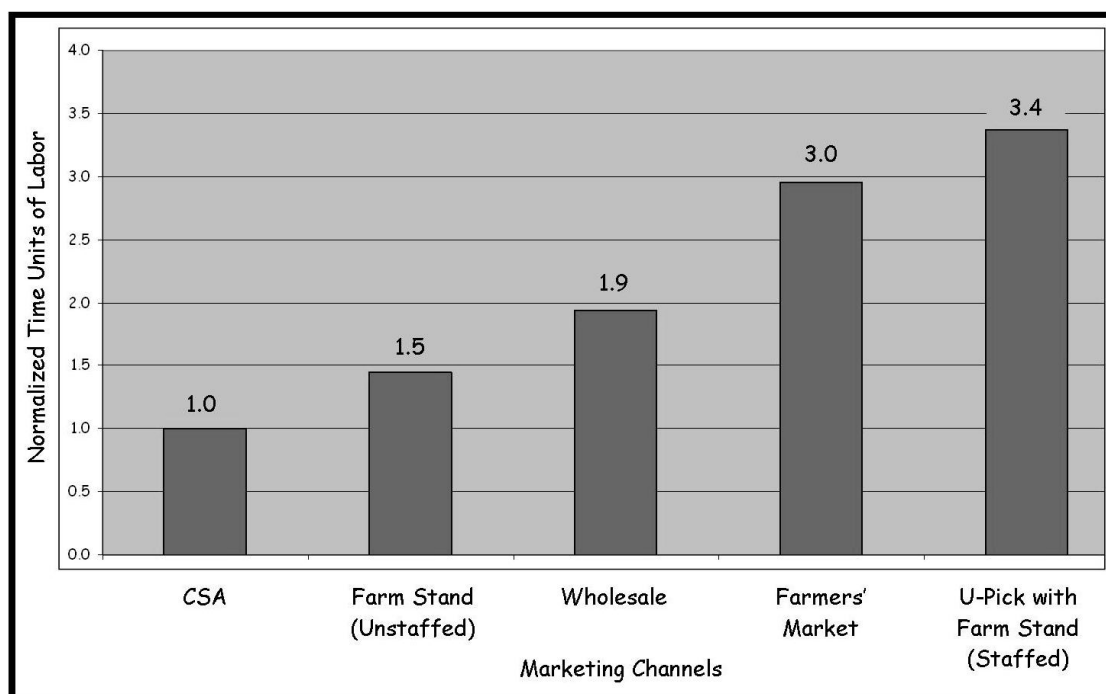
As expected, each of the direct marketing channels, except for CSA, aroused concerns over customer turn out (Table 2). Factors such as weather, location, and the availability of parking were all mentioned as risks when direct marketing. Attendance can also be affected by

competing events in the area. Weather, however, was the single biggest factor in determining attendance.

The most frequently cited concern regarding all marketing channels was high labor and marketing costs (Table 2). Of the direct channels, high marketing costs was most frequently mentioned for farmers' markets that tend to be labor intensive and carry additional marketing costs, such as market fees, advertising, and travel. The wholesale channel cited as having the highest marketing costs was the distributor. Respondents mentioned a high level of labor needed to solve the "logistical headaches" of delivery, the high level of quality control work, and the added "time and energy for good service" when selling wholesale.

### *Labor Requirements*

While surveyed farmers perceived that wholesale channels were generally more labor intensive than direct channels, data from the case study farms demonstrates that in wholesale, the return in gross sales for each hour worked is about the average of all channels evaluated. This is illustrated in Figure 5, which depicts the hours of marketing labor (including operator labor) needed in each channel to achieve the same dollar level of gross sales. The farmers' market and u-pick (staffed) channels required higher than average levels of labor to achieve the same level of sales. Recall, however, that only one of the four farms in the case study offers u-pick. Thus the u-pick channel here represents a u-pick business that is staffed for 12 hours/day, every day of the week. The farm stand channel (unstaffed) is also represented with data from just one farm.



**Figure 5: Comparison of marketing labor needed for \$2,000 in gross sales.**

While many farmers enjoy customer interaction and feedback, some prefer not to deal with customers. Farmers' market, farm stand, and u-pick are channels that generally require a high degree of customer interaction and are channels that reward a tidy appearance and welcoming display. Of course, farm stands and u-pick sales can be conducted using honor system payment, but some minimal level of customer interaction is inevitable. CSAs require relatively little customer interaction except for during weekly pick up times, however, CSAs also may have newsletters or email updates for their members.

Wholesale customers require less interaction, except when discussing orders or making deliveries. Also, once a relationship is established with a wholesale buyer, sales calls take less time. Wholesale accounts allow more anonymity; however, promotion in the form of cases of free sample product is common.

### **Other Channel-Specific Costs**

While some operational costs are common among all marketing channels (utilities, equipment, insurance, licenses and certifications, vehicles, and buildings etc.), each channel has costs and requirements that are specific to that channel. A list of associated costs by marketing channel is summarized in Table 3.

Reusable plastic crates are used for harvest, storage, and transport of produce. They are convenient and cost effective (around \$14 each) because they are durable, washable, and can be stacked when full of produce. Crops are harvested directly into the plastic containers in the field, then moved into a cooler, and brought to direct marketing channels. In contrast, with wholesale channels, the container is lost into the supply chain, so cardboard boxes are used, adding cost. Each farm studied used a combination of both plastic and cardboard boxes, and reported spending between \$500 and \$1500 annually on cardboard boxes. In addition, an assortment of other marketing supplies is purchased, including quart and pint containers, plastic bags, twist ties, and rubber bands. These supplies are purchased in large quantities once or twice per year. Direct marketing channels offer more opportunity for reuse of these supplies compared with wholesale channels.

One cost specific to farmers' markets is the members' fees and daily market fees. For example, at the Ithaca Farmer's Market, a membership costs \$300 paid over three years with a \$100 annual application fee. Potential vendors can also choose a non-voting membership which costs \$100 for application. Every member pays daily market fees, which are \$25 for each Saturday market, and \$15 each for Sunday and Tuesday markets (other markets in the region cost less). In addition, a tent, along with tables, a scale, shopping bags, and signage with the farm's name and prices are all common supplies and equipment needed for most markets. A benefit of membership in a farmers' market is that the advertising is done by the market. Individual farms do not need to advertise, but must maintain a high level of product quality and variety to attract customers to their booth.

CSAs require advertising, generally through a combination of brochures, print ads, websites, and signage. Presence at a farmers' market and word of mouth are also useful ways to sell memberships; however, they require a high level of organization and administration in selling memberships, as well as having a suitable location for member share pick-up.

**Table 3. Marketing channel associated costs.**

|   | Farmers' Market | CSA | U-Pick | Farm Stand | Wholesale: Restaurant, Grocery, & Distributor |
|---|-----------------|-----|--------|------------|---|
| Reusable plastic crates   | R               | X   | O      | R          | R   |
| Single use cardboard produce boxes                                  | O               | O   | O      | O          | X   |
| Twist ties, packaging, containers, bags                             | X               | O   | NA     | R          | X   |
| Customer shopping bags  | X               | O   | X      | X          | NA  |
| Farm sign (s)   | X               | X   | X      | X          | NA  |
| Building/Tents, tables, tablecloth, chairs                          | X               | X   | X      | X          | X   |
| Cash register/box Scale, calculator                                 | X               | NA  | X      | X          | NA  |
| Pricing signs   | X               | NA  | X      | X          | NA  |
| Market fees   | X               | NA  | NA     | NA         | NA  |
| Brochures & flyers  | O               | R   | R      | O          | O   |
| Advertising   | NA              | R   | R      | O          | NA  |
| Transportation/Delivery   | X               | NA  | NA     | NA         | X   |
| Washing and sorting equipment                                       | O               | O   | NA     | O          | R   |
| KEY: X = Necessary R = Recommended O = Optional NA = Not applicable |                 |     |        |            |   |

The u-pick and farm stand channels, have very flexible levels of associated costs depending on the scale of the operation and the marketing skills of the operator. Some stands involve a simple, inexpensive tent and table style, with one road side sign at the location and an old coffee can for money. Larger and more managed operations may include specialized buildings, large tents, coolers, a cash register, bags, boxes and staff. The choice of whether or not to staff a stand or u-pick will have a large impact on the operation's profitability.

Wholesale channels involve significantly fewer associated costs. While the number of these costs may be fewer in number, the level of these costs can be high. Fuel costs for delivery, refrigerated equipment, training and certifications for food safety, packaging, and processing equipment are all anticipated costs for the producer selling wholesale. While small-scale sales to independent wholesale buyers may not entail such costs, a farmer selling primarily through wholesale is likely to encounter them.

Each channel has associated costs. Due to the potential for large variations in the scale of sales through each channel, the operator's chosen level of marketing management, and staffing, it is



not useful to compare the channels in regard to these costs here. However, these associated costs should be considered when individual operations decide on their optimal marketing channel mix.

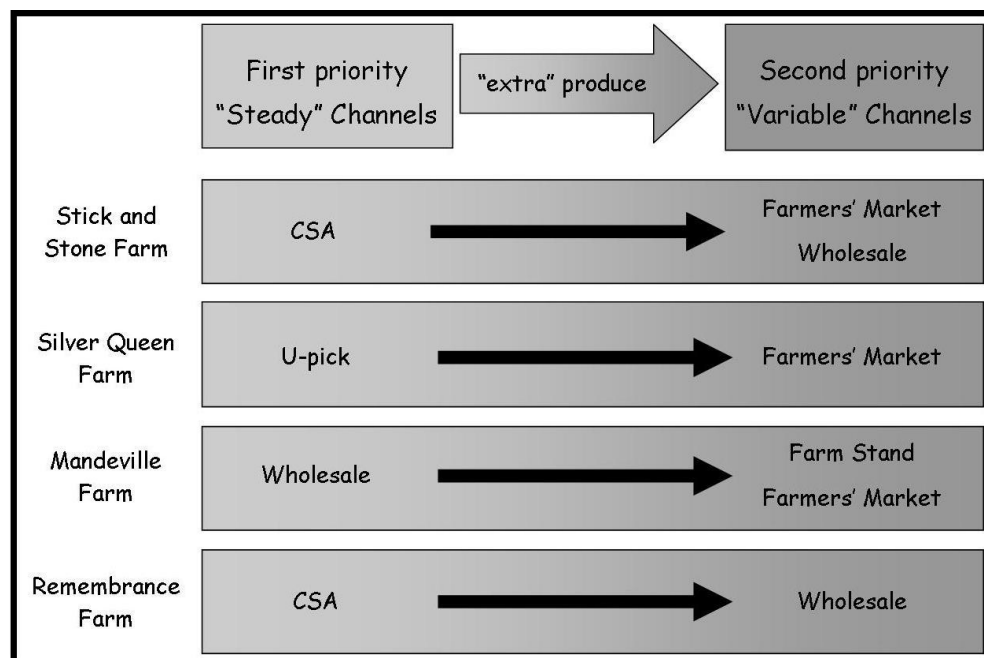
### Identifying Your Marketing Channel Strategy

As discussed above, choosing the appropriate marketing mix includes consideration of many factors, including sales volume, risk, lifestyle preference and stress aversion, labor requirements, and channel-specific costs. The weights (or importance) assigned to each of these factors is unique to the individual or firm. Additionally, the nature of highly perishable crops, along with the risks and potential sales volumes of particular channels, requires combining different channels to maximize firm performance. In Appendix I, we provide a summary of the major characteristics to consider when evaluating alternative marketing channels.

Multiple channel strategies were utilized by all of the case study farms. Figure 6 illustrates the different marketing channel strategies used by the farms that allowed them to diversify the sources of their income, as well as optimizing sales of unpredictable levels of harvest. Each farm has a “steady” marketing channel with a relatively consistent demand. This channel represents the farm’s first priority for the weekly harvest. Once that channel is satisfied, the farm’s other channels can be supplied with additional harvest. For example, Stick and Stone Farm’s priority is its weekly CSA members. Once sufficient produce is available for CSA members, the farm can market “extra” products to its farmers’ market and wholesale customers.

### Channel Ranking

To overcome the difficulty of comparing channels, we develop a simple, but effective, ranking system to summarize the major factors influencing the business performance of a channel. Table 4 shows each channel’s factor scores for the four case study farms based on labor requirements,



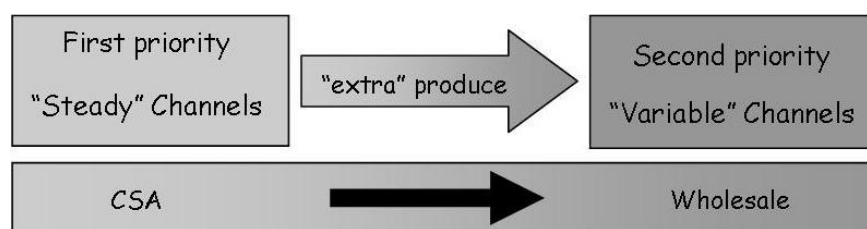
**Figure 6. Marketing channel combinations used by case study farms.**

sales volume, and profitability from above. Each set of factor scores across channels is ranked from “1” (i.e., the highest rated channel for that factor) to “5” (i.e., the lowest rated channel for that factor), and scaled to reflect the relative distance between them. The ranking of channel riskiness comes from the results of the 14-farm survey.

The scaled factor rankings for each channel are averaged to determine the final channel scores, either un-weighted or factor-weighted. The use of factor weights allows individuals to give greater weight to those factors that may be more important (e.g., sales volume) to them than others (e.g., riskiness). The lowest overall score is defined as the top performing channel; however, channels scoring low and close to each other provides some indication of preferred multi-channel strategies.

For our general case (assuming equal factor weights), the top performing channel was the CSA, including top rankings for profit percentage, risk, and marketing labor requirements. Wholesale channels ranked in the middle, primarily due to differences in labor requirements across the direct channel options. The farmers’ market had the lowest overall ranking, although not the least profitable, suffering from a combination of higher labor demands and low sales volumes. That said, the farmers’ market can still be a useful resource for small-scale farmers, particularly new farmers, in terms of enhancing farm exposure and advertising for other channels utilized.

Changes in channel rankings are evident when we assume differing weights across factors. In the example presented, more weight is placed on sales volume and less on perceived risks. In this case, the wholesale channel improves its ranking relative to the equal weight scenario, more readily suggesting a strategy that incorporates both CSA and wholesale channels. Such a strategy is illustrated in Figure 7. While for this selection of farms the CSA appears to be the best channel, as mentioned above, optimizing sales of perishable crops requires the flexibility of combining different channels capable of absorbing unpredictable volumes. Selling through multiple channels can be an effective way to have a ready market for all produce, e.g., selling the best and most uniform product to wholesalers and the rest sold direct.



**Figure 7. Preferred multiple-channel strategy (4 case study farms).**

### Channel Evaluation Tool for Growers

As a result of this study, a simple spreadsheet tool (*Marketing Channel Evaluation, v1.0*) was developed to evaluate and compare marketing channels for small-scale fruit and vegetable producers, providing results similar to those presented in Table 4. The results of the channel ranking tool will aid in informed decision making for farmers wishing to change their marketing mix, increase profitability, or decrease the amount of labor involved in their current marketing

**Table 4. Market Channel Evaluation and Ranking (4 case study farms).**

| Market Channel                | Labor Required <sup>a</sup> |             | Sales Volume <sup>b</sup> |             | Average Profit <sup>c</sup> |             | Risk <sup>d</sup> | Final Scores <sup>e</sup> |                 |
|-------------------------------|-----------------------------|-------------|---------------------------|-------------|-----------------------------|-------------|-------------------|---------------------------|-----------------|
|                               | Labor Index                 | Scaled Rank | Volume Index              | Scaled Rank | Profit %                    | Scaled Rank | Scaled Rank       | Un-Weighted               | Factor-Weighted |
| CSA                           | 1.0                         | 1.0         | 1.7                       | 3.8         | 87                          | 1.0         | 1.0               | 1.7                       | 2.1             |
| Farm Stand (unstaffed)        | 1.5                         | 1.8         | 1.3                       | 4.5         | 82                          | 1.7         | 3.0               | 2.8                       | 3.0             |
| Wholesale                     | 1.9                         | 2.5         | 3.4                       | 1.0         | 58                          | 5.0         | 5.0               | 3.4                       | 2.8             |
| U-pick w/Farm Stand (staffed) | 3.4                         | 5.0         | 1.5                       | 4.2         | 62                          | 4.4         | 2.0               | 3.9                       | 4.2             |
| Farmers' Market               | 3.0                         | 4.3         | 1.0                       | 5.0         | 67                          | 3.8         | 4.0               | 4.3                       | 4.4             |
| Factor Weights <sup>f</sup>   | 0.25                        |             | 0.40                      |             | 0.25                        |             | 0.10              |                           |                 |

<sup>a</sup> Normalized labor index scores based on computed labor hours per sales dollar (Figure 5). The scaled rankings range from 1 to 5 (the number of channels evaluated), where 1 is the 'best' and 5 is the 'worst'. The scaling considers how far apart the factor results are from each other, rather than just simply ranking them.

<sup>b</sup> Normalized volume index scores based on computed dollar volume sales (Figure 3).

<sup>c</sup> Average profit percentages per dollar of gross sales are calculated as  $100 * [(sales - (labor + mileage)) / sales]$  (Figure 4).

<sup>d</sup> Risk ranking based on farmer survey overall rankings.

<sup>e</sup> Final scores represent average scaled rankings across factors, either un-weighted or factor-weighted. The lowest score represents the highest performing channel. Channels scoring low and near to each other indicate give an indication of preferred multiple-channel options.

<sup>f</sup> The factor weights used here are for illustrative purposes only, where sales volume is the most important factor (0.40), risk is the least important factor (0.10), and labor requirements and per unit profits are somewhere in between (0.25). Individual factor weights should be from 0 to 1, and the sum over all weights must equal 1.

activities. In addition, with the tool, producers are able to weight the various ranking factors to their own particular preferences.

Our goal is to make the evaluation tool available to participating Cornell Cooperative Extension (CCE) staff members to use with interested producer clients. Producers who would like the evaluation simply need to contact a CCE staff member and track their marketing labor for one week (or longer) on the provided worksheets. The producers can then submit the completed worksheets back to CCE to complete the analysis. In addition, farmers need to record their gross sales, by channel, for the same time period. It is recommended that each farm record 2-3 “snapshot” weeks throughout the season for the best results. Note, the accuracy of the ranking is only as good as the time and attention to detail that goes into the data collection.

The spreadsheet template (based in MS Excel) evaluates each channel based on labor required, sales volume, profit (relative to labor costs), and the producer’s channel rankings based on perceived risks. The use of this tool does not necessarily guarantee or imply increased returns or profitability. Rather, it is used to assist management in understanding and evaluating the performance of marketing channels utilized. The template provides a simple, yet effective, tool to give producers more insight on their operation and encourages improved record keeping.

Copies of the instructions and data input and output sheets for *Marketing Channel Evaluation, v1.0* are included in Appendices II and Appendix III. To learn more about this tool, future training opportunities, or to request a copy of the template files, log sheets, and instructions, please contact Todd Schmit ([tms1@cornell.edu](mailto:tms1@cornell.edu)), Assistant Professor, Department of Applied Economics and Management, Cornell University.

### **Opportunity for Further Study**

To take advantage of the data being collected by participating growers, we would like to use the information collected through the use of *Marketing Channel Selection, v.1.0* for further research. By collecting additional data throughout the state, we will be able to more comprehensively evaluate alternative market channels and how marketing costs vary by region given varying spatial, demographic, and market characteristics. As such, we are asking participating producers to share their information and data collected with us to support this larger study. Each producer will need to sign the producer consent form attached at the end of this document. As feedback is received, we expected to modify and improve the selection tool in the future.

All individual information will be kept strictly confidential and reported only in aggregate form. In addition, participating producers and CCE agents will receive copies of the published reports generated from the project to use in educational curricula development or to use as a marketing resource for small-scale fruit and vegetable operations. We also plan to provide regular benchmarking reports so that individual producers can evaluate their results relative to similar operations involved in the project.

Please contact Todd Schmit ([tms1@cornell.edu](mailto:tms1@cornell.edu)), Assistant Professor, Department of Applied Economics and Management, Cornell University, for more information.

**APPENDIX I. Major characteristics of marketing channels to consider.**

|   | <b>Farmers' Market</b>   | <b>CSA</b>  | <b>Farm Stand</b>  | <b>U-Pick</b>   | <b>Distributor</b>   | <b>Grocery</b>   | <b>Restaurant</b>  |
|---|--|---|--|---|--|--|--|
| <b>Risks</b>                                  | Low customer turn-out, price competition, leftover unsold product.             | Farmer makes commitment up-front, customers share the risk.         | Low customer turn-out.   | Low customer turn-out. People on the farm."                                     | Distributors "call the shots." Inconsistent orders, buyer back-out.            | Inconsistent orders, buyer back-out.   | Unpaid debts, buyer back-out.                                      |
| <b>Prices &amp; Profit</b>                    | Prices varies. Can be highest among the channels. Labor costs relatively high. | Price is similar to wholesale, however, profit is generally higher. | Prices vary, but high profit potential. Location is a big factor in price. | Prices vary, but high profit potential. Location is a big factor in price.      | Price is low: Producer is a "price taker." Wholesale prices are generally low. | Price is low: Producer is a "price taker." Wholesale prices are generally low. | Prices vary. Usually higher than other wholesale prices.           |
| <b>Volume</b>                                 | Varies with market. Low to medium.   | High: It is possible to "move" all the produce harvested.           | Medium to low: location and competition dependant.                         | Medium to low: location and competition dependant.                              | High   | High to variable.  | Variable, usually small.   |
| <b>Level of Marketing Management Required</b> | High: Many hours dedicated to selling. Most markets run 3-5 hours.             | High: Must sell memberships and facilitate weekly share pick-ups.   | Variable: Ranges from unstaffed honor system to staffed stores.            | Variable: Ranges from unstaffed honor system to staffed stores. Must advertise. | Low: Relatively quick & easy for volume sold. Must meet packing standards.     | Low: Relatively quick & easy for volume sold. Must meet packing standards.     | Variable: A high level of service for the volume sold.             |
| <b>Associated Costs</b>                       | Market fees, equipment, travel, hired labor.                                   | Packaging materials, advertising, brochures.                        | Road side signs and other advertising. Sales staff is optional.            | Road side signs and other advertising. Sales staff is optional.                 | Cooling and processing equipment for high volumes. Delivery costs.             | Cooling and processing equipment for high volumes. Delivery costs.             | Cooling and processing equipment for high volumes. Delivery costs. |
| <b>Farmer Stress</b>                          | Low: "Show up or don't show up."   | Low to medium.  | Low  | Low   | High: Distributors cited as highest stress customers.                          | Medium to high.  | Medium to high.  |

## **APPENDIX II: Marketing Channel Evaluation Template Instructions**

### ***Marketing Channel Evaluation, v.1.0***

#### **DESCRIPTION:**

As a result of the conclusions reached in the cost of marketing study conducted during the summer of 2008, a tool was developed to evaluate and compare marketing channels for individual farms. The results of the channel ranking tool aid in informed decision making for farmers wishing to change their marketing mix, increase profitability, or decrease the amount of labor involved in their current marketing activities.

The tool requires the farmer to track all marketing labor activities for at least one week of normal, peak season business. The accuracy of the ranking is only as good as the time and attention to detail that went into the data collection. Farmers who would like the evaluation simply need to sign up with a participating Cornell Cooperative Extension (CCE) staff member, track their marketing labor for one week (or longer) on the provided worksheets, and submit the completed worksheets back to the CCE staff member for analysis and evaluation. In addition, farmers need to record their gross sales, by channel, for the same time period. It is recommended that each farm record 2-3 “snapshot” weeks throughout the season for the best results.

The spreadsheet template evaluates each channel based on labor required, sales volume, profit (relative to labor costs), and the producer’s channel rankings based on perceived risks. However, the use of this tool does not guarantee or imply increased returns or profitability. Rather, it is used to assist management in understanding and evaluating the performance of marketing channels they currently utilize. The template provides a simple, yet effective, tool to give producers more insight on their operation and to encourage record keeping.

#### **INSTRUCTIONS:**

When a farmer asks to have their marketing channel performance evaluated using this template, or when it is recommended by CCE professionals, we provide a set of step by step instructions below. Before completing this exercise for the first time, it is important that one reviews the MS Excel template and spreadsheets. For the week to be studied, you will need to collect from the farmer all employee names, pay rates, and daily gross sales specific to each marketing channel used. In addition, you should collect the number of acres in production and a list of the crops.

Print and give to the farmer sufficient blank copies of the Daily Labor Logs along with the Daily Labor Log Instruction Sheet. Take time to explain how filling out the sheets is critical, and that accurate information will produce accurate results.

#### **Information to collect from the farmer:**

1. List of marketing channels used.
2. List of all people (owners, family, volunteers, and hired employees) involved in the marketing process.
3. Pay rates for each hired employee.
4. Gross sales for each channel for the week (It is best if the farm keeps daily records).

5. Number of acres in vegetable & fruit production. Land used for other crops, such as hay and grains, should not be included.
6. List of all vegetable and fruit crops grown and sold.
7. Rankings of perceived 'riskiness' in operating in each channel (see Part 3 below).
8. Relative weights assigned to the factors used in the ranking procedure (see Part 3 below).

#### **Information to give the farmer:**

1. Daily Labor Log instructions.
2. Sufficient copies of blank Daily Labor Logs (Pens and clipboards are helpful too).
3. Final results upon completion of the analysis, including both oral and written presentation.

Once the farm has completed one week of Daily Labor Logs, the logs should be reviewed to clarify any errors or confusion. Next, using the MS Excel template, the data is entered, evaluated and interpreted.

## **ENTERING THE FARM DATA:**

It is a good idea to print out the instruction below and use them as you go through the template. The template allows for operations with up to 12 staff people (including paid and unpaid). If the operation has 6 or less staff (including paid and unpaid), use the tabs marked "6 staff"; if the operation has 7 to 12 staff, use the tabs marked "12 staff." In addition, the template allows for up to 6 market channels. If more than 12 staff or more than 6 market channels are to be entered, please contact us and we will produce a new template for you. If you have less channels or staff than the template allows, simply leave the cells blank.

Before you enter any data, do a "save as" with the "Marketing Channel Evaluation" template (i.e., Excel workbook file) and save using a name with the farm name in the title. All cells to enter data in are highlighted in yellow.

### **X STAFF - PART 1:**

**Step 1:** Begin in the tab marked "PART 1", for either the 6 or 12 staff tabs. Enter the employee names and pay rates. In the box to the right of where the sheet says "**Employee 1**" click on "**name 1**" and type in the first person's name. The person's name will now appear wherever it is appropriate throughout the template. Click on "**\$0.00**" and enter the person's hourly rate (Ex. \$7.25).

**NOTE:** Include in this list ALL unpaid labor as well. This includes owners, spouse, children, and volunteers. It is best to assign a value to unpaid labor's pay rate, such as the average rate of all paid labor or minimum wage.

**Step 2:** Enter each of the marketing channels that the farm uses. In the box to the right of where the sheet says "**Channel 1**" click on "**channel 1**" and type in a marketing channel name. The channel name will now appear wherever it is appropriate throughout the template.

**NOTE:** Marketing Channels include: Farmers' market, Farm Stand, U-pick (also called pick-your-own), Grocery/retail, Restaurant, Distributor, CSA (Community Supported Agriculture), Institution/School, and less often, Produce Auction, Product Brokers, and Food Processors.

**Step 3:** Collect labor data for at least one week using the Daily Labor Logs. Input the labor data for each person, for each day, **by activity**. Note that the 10 activities included on the Daily Labor Logs are aggregated into 4 activities in the template.

**NOTE:** As you review an individual's completed Daily Labor Logs, you will find several entries in one day for the same activity, for example, "harvest". To enter and sum this time, click on the appropriate cell (C24 for the first person, Monday, Harvest), type "=" and the first number of hours. For each subsequent entry for the same person, same activity, same day, click on the same cell, then, on the formula bar, click after your last entry and type "+" then the new number of hours. This way, the cell will reflect the total number of hours for that person, on that day, for that activity. For example:

| name 1       |           | Harvest  | Cull/ grade/ sort/ wash/<br>bunch/ bag/ package |
|--------------|-----------|----------|---|
| Total Hours: | Monday    | =2.5+3+1 | 0.00  |
| 0.00         | Tuesday   | 0.00     | 0.00  |
|              | Wednesday | 0.00     | 0.00  |

**Step 4:** Re-enter the same data from the activity logs, however, now it will be entered **by marketing channel, by activity**. The data is entered twice to allow for different kinds of analysis, but mostly just for double checking that the data were entered correctly and consistently.

**NOTE:** If someone has checked more than one marketing channel for the same entry, divide the time among the channels and note it on the worksheet. Base how the time is divided on interviews with the employees. Your notes will allow consistent records and avoid confusion. For example:

|   |  |  |   |
|---|--|--|---|
| Time spent (to nearest 15 min): <u>2 hrs.</u>   |  | Vegetable(s): <u>squash</u>                |   |
| <b>Activity: Check all that apply</b>   |  |  |   |
| <input checked="" type="checkbox"/> Harvest   | <input type="checkbox"/> Cull/grade/sort/wash          | <input type="checkbox"/> Bunch/Bag/Package | <input type="checkbox"/> Pack orders/boxes                                  |
| <input type="checkbox"/> Bookkeeping/Bills  | <input type="checkbox"/> Travel to market              | <input type="checkbox"/> Deliveries        | <input type="checkbox"/> Sales calls  |
| <input type="checkbox"/> Sales Time   | <input type="checkbox"/> Other (please describe) _____ |  |   |
| <b>Product Destination: Check all that apply</b> (for bottom row, please write name of biz) |  |  |   |
| <input type="checkbox"/> U-pick   | <input checked="" type="checkbox"/> Farmers' Market    | <input type="checkbox"/> Farm Stand        | <input type="checkbox"/> Other _____  |
| <input checked="" type="checkbox"/> Grocery Store   | <input type="checkbox"/> Restaurant                    | <input type="checkbox"/> Distributor       | <u>Recorded as 1.25 hours for Grocery,<br/>0.75 for FM per conversation</u> |

**Step 5:** Input the farm's gross sales for the week, by channel. If the farm did not provide daily figures, just enter everything on one day.



**NOTE:** For the CSA channel, farms are paid at the beginning of the season for shares of their produce. For the purposes of this analysis, ask the farmer to place a value on the amount of produce that was distributed through the CSA channel on each share pick-up day for the week. Most farms will have a good sense of the quantity and value of produce distributed.

## **X STAFF - PART 2:**

Once Step 5 is completed, you are done with Part 1. Click on the Part 2 tab to continue. There is no data to be entered in the Part 2 tab, but careful review is required to ensure that all data entered in Part 1 is correct.

**Step 6:** Review the totals for each farm worker by channel and by activity. Check the two columns as noted to make sure they display equal values. If not, return to Part 1 and correct.

**Step 7:** Review the farm's labor totals by activity and marketing channel.

**Step 8:** Review the farm's labor costs by marketing channel. This is simply each person's total hours for each channel, multiplied by their pay rate. Since labor is the largest expense in marketing, this reflects the main cost of selling through a marketing channel.

**Step 9:** Review and compare the statistics for each channel. "Profit \$" refers to the Total Gross Sales minus Total Labor Cost for each marketing channel.

## **X STAFF - PART 3:**

Once Step 9 is completed, you are done with Part 2. Click on the Part 3 tab to continue.

In the rankings that follow, the simple rankings are from 1 to the number of channels utilized, ranked from 'best' to 'worst', and only in whole numbers. The scaled rankings are also from 1 to the number of channels utilized, but consider how far apart the factor scores are from each other.

**Step 10:** Review the computed Rankings for Sales Volume.

**Step 11:** Review the computed Rankings for % Profit of Gross Sales.

**Step 12:** Review the computed Rankings for Labor Hours. The rank is based on the number of labor hours needed per \$2,000 in gross sales.

**Step 13:** Input the farm's perceived "riskiness" of each channel they participate in, on a scale from 1 to the number of channels utilized. The channel perceived to be least risky gets a "1", and the most risky gets the maximum number of channels utilized. (Equal values share a rank number). The rankings need not be whole numbers in between the top and bottom rankings, as they will depend on how the farm feels the channels rank relative to each other (as with the scaled ranks above).

**Step 14:** **Review** the Final Ranking Scores for each of the marketing channels utilized. The lowest score represents the "best" performing channel based on the four factors evaluated. If all four factors are equally valued, the final rankings are shown in the "Unweighted" column. However, if some factors are more important to the farm than others (e.g., volume or risk), then you should input factor weights below the table. Each weight must be from zero to one, and they must sum to one. The default shows equal weights for all four factors (0.25).

You can now further evaluate the results and discuss them with the grower. Good Luck!

## APPENDIX III: Marketing Channel Evaluation Tool Worksheets

**BEFORE YOU BEGIN TO ENTER DATA, DO A "SAVE AS" WITH THE FARM NAME  
ALL CELLS REQUIRING DATA ENTRY ARE HIGHLIGHTED IN YELLOW.**

**Step 1** Input the list of all workers on the farm (include hired labor, owners, family, volunteers, and other unpaid workers).

|            | Name   | Pay rate (\$ per hour,<br>just enter \$) |
|------------|--------|--|
| Employee 1 | name 1 | \$0.00                                   |
| Employee 2 | name 2 | \$0.00                                   |
| Employee 3 | name 3 | \$0.00                                   |
| Employee 4 | name 4 | \$0.00                                   |
| Employee 5 | name 5 | \$0.00                                   |
| Employee 6 | name 6 | \$0.00                                   |

Note: While farm owners and some family members may not be paid, it is best to estimate a value for their time or to use the rate from the highest or average of hired help.

**Step 2** Input each of the Marketing Channels you participate in.

|           |           |
|-----------|-----------|
| Channel 1 | channel 1 |
| Channel 2 | channel 2 |
| Channel 3 | channel 3 |
| Channel 4 | channel 4 |
| Channel 5 | channel 5 |
| Channel 6 | channel 6 |

Sample channels:  
Farmers' Market    Distributor  
Farm stand        CSA  
U-pick              Institution/ school  
Grocery/retail  
Restaurant

**Step 3** Collect labor data for one week using the Labor Activity Logs. Input each person's daily hours by *Activity*.

|                                |           | Harvest | Cull/ grade/ sort/ wash/<br>bunch/ bag/ package | Pack orders/ boxes/<br>load truck/ travel/<br>deliver | Bookkeeping/ bills/<br>Sales Calls/ Sales time | Total |
|--------------------------------|-----------|---------|---|---|--|-------|
| name 1<br>Total Hours:<br>0.00 | Monday    | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | Tuesday   | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | Wednesday | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | Thursday  | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | Friday    | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | Saturday  | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | Sunday    | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | Total     | 0.00    | 0.00  | 0.00  | 0.00   |       |

**Step 4** Input each person's hours again, but now by *Marketing Channel*.

|                                |           | Harvest | Cull/ grade/ sort/ wash/<br>bunch/ bag/ package | Pack orders/ boxes/<br>load truck/ travel/<br>deliver | Bookkeeping/ bills/<br>Sales Calls/ Sales time | Total |
|--------------------------------|-----------|---------|---|---|--|-------|
| name 1<br>Total Hours:<br>0.00 | channel 1 | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | channel 2 | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | channel 3 | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | channel 4 | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | channel 5 | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | channel 6 | 0.00    | 0.00  | 0.00  | 0.00   | 0.00  |
|                                | Total     | 0.00    | 0.00  | 0.00  | 0.00   |       |

**Step 5** Input the farm's gross sales from the week. (For CSA, enter the value of produce distributed, for wholesale, enter invoiced amounts.)

|           | channel 1 | channel 2 | channel 3 | channel 4 | channel 5 | channel 6 | Total  |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| Monday    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 |
| Tuesday   | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 |
| Wednesday | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 |
| Thursday  | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 |
| Friday    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 |
| Saturday  | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 |
| Sunday    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 |
| Total     | NA        | NA        | NA        | NA        | NA        | NA        | \$0.00 |

## APPENDIX III: Marketing Channel Evaluation Tool Worksheets (continued)

| <b>Step 6 Review and compare</b> each person's totals hours to check for errors. |         |   |  |   |  |                                |
|--|---------|---|--|---|--|--------------------------------|
|  |         |   |  |   | These two columns should show equal values or there is an error on the time cards in PART 1. |                                |
| Name   | Harvest | Cull/ grade/<br>sort/ wash/<br>bunch/ bag/<br>package | Pack orders/<br>boxes/ load<br>truck/ travel/<br>deliver | Bookkeeping/<br>bills/ Sales<br>Calls/ Sales time | Total from<br>Marketing<br>Channel time<br>card.   | Total from daily<br>time card. |
| name 1   | 0.00    | 0.00  | 0.00   | 0.00  | 0.00   | 0.00                           |
| name 2   | 0.00    | 0.00  | 0.00   | 0.00  | 0.00   | 0.00                           |
| name 3   | 0.00    | 0.00  | 0.00   | 0.00  | 0.00   | 0.00                           |
| name 4   | 0.00    | 0.00  | 0.00   | 0.00  | 0.00   | 0.00                           |
| name 5   | 0.00    | 0.00  | 0.00   | 0.00  | 0.00   | 0.00                           |
| name 6   | 0.00    | 0.00  | 0.00   | 0.00  | 0.00   | 0.00                           |
| Farm Total:  | 0.00    | 0.00  | 0.00   | 0.00  | 0.00   |                                |

| Name        | Channel 1<br>channel 1 | Channel 2<br>channel 2 | Channel 3<br>channel 3 | Channel 4<br>channel 4 | Channel 5<br>channel 5 | Channel 6<br>channel 6 |       |
|-------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------|
| name 1      | 0.00                   | 0.00                   | 0.00                   | 0.00                   | 0.00                   | 0.00                   |       |
| name 2      | 0.00                   | 0.00                   | 0.00                   | 0.00                   | 0.00                   | 0.00                   |       |
| name 3      | 0.00                   | 0.00                   | 0.00                   | 0.00                   | 0.00                   | 0.00                   |       |
| name 4      | 0.00                   | 0.00                   | 0.00                   | 0.00                   | 0.00                   | 0.00                   |       |
| name 5      | 0.00                   | 0.00                   | 0.00                   | 0.00                   | 0.00                   | 0.00                   |       |
| name 6      | 0.00                   | 0.00                   | 0.00                   | 0.00                   | 0.00                   | 0.00                   | Total |
| Farm Total: | NA                     | NA                     | NA                     | NA                     | NA                     | NA                     | 0.00  |

| <b>Step 7 Review</b> the farm's labor hour totals. This is how many hours were devoted to specific marketing activities or channels. |         |                |          |            |             |
|--|---------|----------------|----------|------------|-------------|
| Farm Total   | Harvest | Process & Pack | Delivery | Sales Time | Total Hours |
|  | 0.00    | 0.00           | 0.00     | 0.00       | 0.00        |

| Farm Total | channel 1 | channel 2 | channel 3 | channel 4 | channel 5 | channel 6 | Total Hours |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|
|            | NA        | NA        | NA        | NA        | NA        | NA        | 0.00        |

| <b>Step 8 Review</b> the farm's labor costs by marketing channel. |          |           |           |           |           |           |           |        |        |
|---|----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|--------|
| Name  | Pay Rate | channel 1 | channel 2 | channel 3 | channel 4 | channel 5 | channel 6 | Total  | Check  |
| name 1  | \$0.00   | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 | \$0.00 |
| name 2  | \$0.00   | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 | \$0.00 |
| name 3  | \$0.00   | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 | \$0.00 |
| name 4  | \$0.00   | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 | \$0.00 |
| name 5  | \$0.00   | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 | \$0.00 |
| name 6  | \$0.00   | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00    | \$0.00 | \$0.00 |
| Farm Total:   |          | NA        | NA        | NA        | NA        | NA        | NA        | \$0.00 |        |

| <b>Step 9 Review and compare</b> the Gross Sales and Profit statistics for each marketing channel. |  |           |                               |   |   |
|--|--|-----------|-------------------------------|---|---|
|  | Marketing<br>Channel % of<br>Total Gross | Profit \$ | Profit as % of<br>Gross Sales | Gross Sales per<br>Hour of<br>Marketing Labor | Profit \$ per<br>hour of<br>Marketing Labor |
| channel 1  | NA                                       | NA        | NA                            | NA  | NA  |
| channel 2  | NA                                       | NA        | NA                            | NA  | NA  |
| channel 3  | NA                                       | NA        | NA                            | NA  | NA  |
| channel 4  | NA                                       | NA        | NA                            | NA  | NA  |
| channel 5  | NA                                       | NA        | NA                            | NA  | NA  |
| channel 6  | NA                                       | NA        | NA                            | NA  | NA  |
| Total/Average  |  | \$0.00    |                               |   | #DIV/0!                                     |

### APPENDIX III: Marketing Channel Evaluation Tool Worksheets (continued)

|  |           |                   |             |  |  |
|--|-----------|-------------------|-------------|--|--|
| <b>Review</b> the computed Rankings for Sales Volume. The simple rankings are from 1 to the number of channels utilized, ranked from 'best' to 'worst', and only in whole numbers. The scaled rankings are also from 1 to the number of channels utilized, but consider how far apart the gross sales numbers are from each other. |           |                   |             | <b>Rank Ordering:</b><br><br><div style="display: flex; justify-content: space-between; width: 100%;"> <span>1    <b>Best</b></span> <span>0    <b>Worst</b></span> </div> |  |
| Step 10  |           | Total Gross Sales | Simple Rank | Scaled Rank  |  |
|  | channel 1 | NA                | #VALUE!     | #VALUE!  |  |
|  | channel 2 | NA                | #VALUE!     | #VALUE!  |  |
|  | channel 3 | NA                | #VALUE!     | #VALUE!  |  |
|  | channel 4 | NA                | #VALUE!     | #VALUE!  |  |
|  | channel 5 | NA                | #VALUE!     | #VALUE!  |  |
|  | channel 6 | NA                | #VALUE!     | #VALUE!  |  |

|  |           |                         |             |             |  |
|--|-----------|-------------------------|-------------|-------------|--|
| <b>Review</b> the computed Rankings for % Profit of Gross Sales. The simple rankings are from 1 to the number of channels utilized, ranked from 'best' to 'worst', and only in whole numbers. The scaled rankings are also from 1 to the number of channels utilized, but consider how far apart the profit numbers are from each other. |           |                         |             |             |  |
| Step 11  |           | % Profit of Gross Sales | Simple Rank | Scaled Rank |  |
|  | channel 1 | NA                      | #VALUE!     | #VALUE!     |  |
|  | channel 2 | NA                      | #VALUE!     | #VALUE!     |  |
|  | channel 3 | NA                      | #VALUE!     | #VALUE!     |  |
|  | channel 4 | NA                      | #VALUE!     | #VALUE!     |  |
|  | channel 5 | NA                      | #VALUE!     | #VALUE!     |  |
|  | channel 6 | NA                      | #VALUE!     | #VALUE!     |  |

|  |           |   |             |             |  |
|--|-----------|---|-------------|-------------|--|
| <b>Review</b> the computed Rankings for Labor Hours. The rank is based on the number of labor hours needed per \$2,000 in gross sales. The simple rankings are from 1 to the number of channels utilized, ranked from 'best' to 'worst', and only in whole numbers. The scaled rankings are also from 1 to the number of channels utilized, but consider how far apart the required labor hours are from each other. |           |   |             |             |  |
| Step 12  |           | Labor Hours required for \$2000 gross sales | Simple Rank | Scaled Rank |  |
|  | channel 1 | NA  | #VALUE!     | #VALUE!     |  |
|  | channel 2 | NA  | #VALUE!     | #VALUE!     |  |
|  | channel 3 | NA  | #VALUE!     | #VALUE!     |  |
|  | channel 4 | NA  | #VALUE!     | #VALUE!     |  |
|  | channel 5 | NA  | #VALUE!     | #VALUE!     |  |
|  | channel 6 | NA  | #VALUE!     | #VALUE!     |  |

|   |           |                    |  |  |   |
|---|-----------|--------------------|--|--|---|
| <b>Input</b> the farm's feelings on the perceived "riskiness" of each channel they participate in, on a scale from 1 to the number of channels utilized. The channel perceived to be least risky gets a "1", and the most risky gets the maximum number of channels utilized. The rankings need not be whole numbers in between the top and bottom rankings, as they will depend on how close the farm feels the channels rank relative to each other (as with the scaled ranks above). |           |                    |  |  |   |
| Step 13   |           |                    |  |  |   |
|   | channel 1 | Enter Rank<br>0.00 |  |  | Note: In a survey of 14 farms, the farmers ranked the channels for risk as follows.<br><br>(1 = lowest risk, 5 = highest risk).<br><br><div style="display: flex; justify-content: space-between;"> <div>CSA</div> <div>1</div> </div> <div style="display: flex; justify-content: space-between;"> <div>U-pick w/farm stand</div> <div>2</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Farm Stand</div> <div>3</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Farmers' Market</div> <div>4</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Wholesale</div> <div>5</div> </div> |
|   | channel 2 | 0.00               |  |  |   |
|   | channel 3 | 0.00               |  |  |   |
|   | channel 4 | 0.00               |  |  |   |
|   | channel 5 | 0.00               |  |  |   |
|   | channel 6 | 0.00               |  |  |   |

|   |           |             |             |                  |           |  |
|---|-----------|-------------|-------------|------------------|-----------|--|
| <b>Review</b> the Final Ranking Scores for each of the Marketing Channels that you use. The lowest score represents the farm's "best" performing channel based on the four factors evaluated. If all four factors are equally valued, the final rankings are shown in the "Unweighted" column. However, if the farm feels that some factors are more important to you than others (e.g., volume or risk), then you should input factor weights below the table. Each weight must be from zero to one, and they must sum to one. The default shows equal weights for all four factors (0.25). The final, weighted results are then displayed in the "Weighted" column. |           |             |             |                  |           |  |
| Step 14   |           | Volume Rank | Profit Rank | Labor Hours Rank | Risk Rank | Final Scores                             |
|   | channel 1 | #VALUE!     | #VALUE!     | #VALUE!          | #VALUE!   | Unweighted: #VALUE!    Weighted: #VALUE! |
|   | channel 2 | #VALUE!     | #VALUE!     | #VALUE!          | #VALUE!   | Unweighted: #VALUE!    Weighted: #VALUE! |
|   | channel 3 | #VALUE!     | #VALUE!     | #VALUE!          | #VALUE!   | Unweighted: #VALUE!    Weighted: #VALUE! |
|   | channel 4 | #VALUE!     | #VALUE!     | #VALUE!          | #VALUE!   | Unweighted: #VALUE!    Weighted: #VALUE! |
|   | channel 5 | #VALUE!     | #VALUE!     | #VALUE!          | #VALUE!   | Unweighted: #VALUE!    Weighted: #VALUE! |
|   | channel 6 | #VALUE!     | #VALUE!     | #VALUE!          | #VALUE!   | Unweighted: #VALUE!    Weighted: #VALUE! |

|   |      |      |      |      |         |
|---|------|------|------|------|---------|
| Factor Weighting                          | 0.25 | 0.25 | 0.25 | 0.25 | Sum = 1 |
| Weights over all factors MUST sum to one! |      |      |      |      |         |

**Marketing Channel Performance Study Consent Form**

You are being asked to take part in a research study that assesses the profitability and marketing opportunities available to small-scale fruit and vegetable growers in New York State. We are asking you to take part because you are currently working with a Cornell Cooperative Extension (CCE) educator to evaluate your firm's marketing channel performance. Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

**What the study is about:** The purpose of this study is to evaluate alternative market channels utilized by small-scale fruit and vegetable producers in New York State and how marketing costs vary by region, given varying spatial, demographic, and market characteristics.

**What we will ask you to do:** Producers interested in evaluating their own marketing channel performance can sign up with a participating CCE educator to utilize the *Marketing Channel Selection* software templates, data collection forms, and detailed instructions provided. If you agree to be part of the study, we will utilize the information you collect, along with other participating firms' information, to conduct further research evaluating and comparing viable marketing channel strategies for small-scale producers. With the possible exception of clarifying any issues in the original data collected, there are no additional activities required by you.

**Risks and benefits:** I do not anticipate any risks to you participating in this study other than those encountered in day-to-day life. Through your participation, you will gain increased insight into your firm's profitability through each way that you sell your products.

**Compensation:** No supplemental compensation will be provided.

**Your information will be confidential:** The records of this study will be kept private. In any sort of report we make public, we will not include any information that will make it possible to identify you. Research records will be kept in a locked file; only the researchers will have access to the records.

**Taking part is voluntary:** Taking part in this study is completely voluntary. You may skip any components of the study that you do not want to answer or provide data for. If you decide not to take part or to skip some of the components, it will not affect your current or future relationship with Cornell University or CCE. If you decide to take part, you are free to withdraw at any time.

**If you have questions:** The researcher conducting this study is Prof. Todd Schmit, he will be coordinating his efforts with participating CCE educators. Please ask any questions you have now. If you have questions later, you may contact your participating CCE educator; or you can reach Prof. Schmit at [tms1@cornell.edu](mailto:tms1@cornell.edu) or 607-255-3015. If you have any questions or concerns regarding your rights as a participant in this study, you may contact the Institutional Review Board (IRB) at 607-255-5138 or at <http://www.irb.cornell.edu>. You may also report your concerns or complaints anonymously through Ethicspoint at <http://www.ethicspoint.com> or by calling toll free at 1-866-293-3077. Ethicspoint is an independent organization that serves as a liaison between the University and the person bringing the complaint so that anonymity can be ensured.

You will be given a copy of this form to keep for your records.

**Statement of Consent:** I have read the above information, and have received answers to any questions I have asked. I consent to take part in the study.

Your Signature \_\_\_\_\_ Date \_\_\_\_\_

Your Name (printed) \_\_\_\_\_

*This consent form will be kept by the researcher for at least three years beyond the end of the study and was approved by the IRB on April 15, 2009.*