



Feasibility Study

Small/Medium Farm Product Distribution

In the Lower Mainland

Part 4

Farmers' Needs from a Small Farm Distribution Model

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Acknowledgements

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Executive Summary

The premise of this feasibility study is that the traditional distribution system, while very effective for product produced on large Canadian farms and for product sourced internationally, does not work for producers with small/medium sized farms (SMFs). The lack of suitable distribution services have been a barrier for SMFs, hampering the vibrancy of local food systems.

Food hubs are increasingly being recognized as an emerging solution to distribution barriers, addressing aggregation, marketing/sales, and distribution services for small/medium farmers. The growing demand for locally produced food is widely acknowledged by industry, local food non-profits, and government – food hubs can help meet the needs of SMFs, while satisfying demand for locally produced food.

This feasibility study is a review of small food distribution systems that can support SMFs in providing more local food to urban centres, and is composed of the following reports:

1. Requirements for food distribution
2. Business Models and Best Practices
3. Bylaws, Regulations, and Funding Sources
4. Farmers' Needs for a Distribution System
5. Buyers' Needs for a Distribution System
6. Model Development and Comparison

The intention of this report, the fourth in the series, is to provide an account of farmers' needs from a local distribution system. The farmers' perspectives are crucial in identifying their needs as local food producers in the value chain. Buyers and farmers have many shared requirements including trust, communication, preservation of farm identity, and pricing that supports a profitable business. Farmers are willing to bring more product to market under certain conditions: if there are customers for their product, if they have the capacity to produce more product (access to land, labour, and other resources), and if the growing conditions (economically, and environmentally) are suitable. While many SMFs have previously focused on selling their products direct to consumers, there seems to be a growing desire to expand revenue streams by increasing sales to wholesale buyers. Food hub distribution models are being recognized as a way to fix the local food distribution gap.

Interviews were conducted with farmers about their current distribution challenges. The challenges of external distribution for SMFs include the additional cost of paying someone to do this work, the preservation of a farm's brand, the potential for increased logistical complexity, and, if organized by farmers, the shared cost of additional infrastructure such as bigger trucks, or the rental of temperature controlled storage. The main benefit for farmers when distributors have the farmers' interests at the centre of their mandate is that farmers can focus on farming and caretaking their land rather than on marketing/sales. An additional benefit is that buyers can purchase unique local products, and experience specialized services. For example, a regional Food Hub may carry products that require special handling, niche sized items such as small peppers, mini cucumbers, and mini summer squashes. Food Hubs could also help farmers coordinate growing times to extend availability into the shoulder seasons, while also providing direct from farm branding.

The farmers' responses confirm that there is a clear need for coordinating an improved distribution model for small/medium farm product sales to restaurants, retailers, and other wholesale buyers. The flow of farm product from local farms to consumers is currently hampered by the lack of distribution infrastructure suitable for SMF needs. The farmers' needs that were identified in the interviews can be used in helping to guide the design of a distribution model suitable to SMFs. Closing the distribution gap that currently exists will help to satisfy increasing demand of local farm product in the region, and beyond.

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Introduction

Previous reports and feasibility studies have consistently shown that there is an increasing demand for locally-grown and sustainably-produced farm product. While this increase in demand is widely acknowledged by industry, non-profit local food advocates, and government, it is also widely acknowledged that the flow of product from farmers to consumers is significantly hampered by the lack of distribution infrastructure, particularly for small and medium sized farms (1 to 4 hectares). The contribution of farm product from small and medium sized farms to BC's gross farm receipts is substantial – small farms dominate the most intensely farmed regions of BC – that of the Lower Mainland.

The intention of this report, the fourth in the series, is to provide an account of farmers' needs from a local distribution system. In determining how a distribution model can meet farmers' needs, as producers in the value chain, the farmer's perspective is crucial. Buyers and farmers have many shared requirements including trust, communication, preservation of farm identity, and pricing that supports a profitable business. Farmers are willing to bring more product to market under certain conditions: if there are customers for their product, if they have the capacity to produce more product (access to land, labour, and other resources), and if the growing conditions (economically, and environmentally) are suitable. While many SMFs have previously focused on selling their products direct to consumers, there seems to be a growing desire to expand revenue streams by increasing sales to wholesale buyers. Food hub distribution models are being recognized as a way to fix the local food distribution gap.

In order to develop a distribution model that addresses the needs of farmers, interviews were conducted with farmers about their current distribution challenges. Their responses confirmed that there is a clear need for coordinating and improved distribution model for small to medium farm product distribution to restaurants, retailers, and other wholesale buyers. The flow of farm product from farms to consumers is significantly hampered by the lack of distribution infrastructure, particularly for small to medium sized farms.

This report has been organized into the following sections:

- Production End of the Supply Chain
- Identifying the Needs of Farmers
- Current Distribution Practices
- Farmer's Needs for a Distribution Model
- Recommendations for a Distribution Model
- Additional Considerations
- Conclusions

The farmers' needs that were identified can be used in helping to guide the design of a distribution model. Essentially, the purchasing of farm products needs to be simple, and well coordinated to accommodate the needs of both farmers and buyers. Closing the distribution gap that currently exists between small/medium farmers and restaurants, retailers, and other wholesale buyers will support small/medium farmers in increasing the supply of local farm product to the region's growing population.

Production End of the Supply Chain

The agriculture industry in BC is a crucial component of the region's economy. In 2009, it was estimated that the agriculture and agri-food system accounted for over 13% of BC's employment.¹ In 2006, a BC self-reliance report concluded that BC farms alone have the potential to produce 48% of all food consumed in BC.² While self-reliance is not necessarily the overall objective of a regional agri-food hub, these values are real indicators of the significant production value of BC's farms, and their capacity to satisfy the growing demand for local food.

With high quality soils, a moderate climate, access to water, access to diverse markets, and proximity to educational institutions, local farmers are well primed for producing high quality local food products for a provincial population that continues to increase. For instance, the population in Metro Vancouver, a prominent population base located in BC's Lower Mainland, is expected to rise from 2.2 million (2006) to 3.3 million (2040 projection).³ Demand for food is expected to increase at roughly the same rate, which will create opportunities in linking local farm product and local buyers/consumers.

Farmers can bring more product to market under certain conditions: if there are customers for their product, if they have the capacity to produce more product (access to land, labour, and other resources), and if the growing conditions (economically, and environmentally) are suitable. Overall, farmers, and their agri-food counterparts play a significant role in local food economies; however, additional infrastructure will be required to raise the level of local food production in the Lower Mainland.

The farmer's perspective is crucial in identifying how a distribution model can meet the needs of both farmers and their customers. Their perspectives are captured in the following sections.

Identifying the Needs of Farmers

This section of the research looks more closely at the distribution needs from the farmers' perspective. In order to develop a distribution model that works for farmers, farmers' considerations need to be considered. The purchasing of farm products needs to be simple, and coordinated to accommodate the needs of both farmers (the sellers), and their customers (the wholesale buyers). The simpler and more efficient it is for the wholesale buyer to purchase product, the more likely local farm product is to be purchased on a regular and ongoing basis. An ideal distribution model would meet the needs of specific points along the supply chain: producers (small/medium farmers), and consumers (wholesale buyers, including grocers, chefs, institutions etc.).

To investigate the distribution needs of farmers, interviews were conducted with seven farmers. The farmers selected for the interviews were chosen because they had past or current/ongoing experience with selling to wholesale buyers (Eg. restaurants/chefs, grocers/retailers, and distributors).

During the interviews, farmers were asked questions to identify the following:

1. Current Distribution Practices of Small/Medium Local Farmers
2. Distribution Challenges
3. Farmers' Needs for a Distribution Model
4. Additional Considerations

¹ Regional Snapshot Series: Agriculture, 2006

<http://www.fvrd.bc.ca/InsidetheFVRD/RegionalPlanning/Documents/Regional%20Snapshot%20Series/Agriculture%20Snapshot.pdf>

² BC Ministry of Agriculture, 2006

³ Metro Vancouver. "Metro Vancouver 2040 Regional Growth Strategy" Draft February 2009.

The information from primary sources was supplemented with research from secondary sources. This information is outlined below. The list of questions used for conducting interviews with the farmers can be found in the Appendix.

For this report, farmers were specifically selected for the interviews based on two criteria: (1) that they were a small/medium farmer, and (2) that they had previous, or current/ongoing experience with selling to wholesale buyers. Otherwise, the farmer's operations varied considerably. Most farmers focused on selling just their own product. However, one farm in particular sourced product from other farmers to increase the variety and quantity offered in their own product line. Some farmers focused on a small range of crops, while most produced a wide variety and selection of vegetable and/or berry crops. Some farmers also raised livestock, including chickens (for the production of eggs). The farms ranged from 6-7 acres to 40 acres in size. Some farms had small greenhouse operations on-site; some farms also offered U-pick, or other farm attractions (including corn mazes, hay rides, pumpkin patches, and on-site farm stores with value-added products). Four of the farms incorporated multiple enterprises into their business model; these enterprises included specific product lines produced for certain buyers, farm attractions, and buying clubs and CSAs.

In the past, SME farmers have relied heavily on marketing their product directly to consumers – through farm gate sales, on-site stores, CSAs & buying clubs, and farmers' markets. Selling directly to wholesale buyers (restaurants, retailers, agencies, and/or distributors) has been less common in the past, and overall represents a much smaller portion of a typical farmer's revenue stream. However, the interviews revealed that there is a change afoot. Many farmers reported that farmers' markets are no longer their first choice for selling product, and they would like to increase their sales to wholesale buyers. Most farmers reported that they could see a trend in their revenue stream – that over time, the % of revenue generated from wholesale sales was increasing, especially in recent years. Of the farmers interviewed, the % of revenue generated from wholesale sales ranged from 5% to 100%. All farmers reported that they would like help with establishing new customer relationships – especially relationships with wholesale buyers.

Farmers' markets require long hours of work (often an entire day, which includes packing/unpacking, and travel time), with no assurance of sales. Many farmers reported that they are unable to predict why one product will sell out one week, but not the next – often farmers return to their farms with unsold product in their trucks. On hot days especially, product loss due to spoilage can be a concern. For farmers' markets, product is often picked ripe, for immediate use by the consumer. Produce that doesn't sell after a long day at the market often ends up spoiling, contributing not just to food waste, but income loss. The lack of distribution infrastructure (i.e. a refrigerated truck) can also contribute to food waste and income loss. Those farmers who only have a portion of their revenue stream generated by sales to wholesale buyers reported that they would like to increase their sales to wholesale buyers, and decrease their reliance on farmers' market sales.

The farmers identified numerous benefits of a food hub/distribution model that could attend to their marketing and distribution needs:

- Being able to spend more time on their farms; spending less time in trucks and at farmers' markets
- Minimizing risk through establishing producer-seller relationships that focus on mutual benefits. Although sale of product can't be fully guaranteed, having a working relationship that serves both parties' interests can help to take the guesswork out of crop planning. For example, a farmer might grow a crop specific to a buyer's needs that could be harvested at a time when the buyer wants the product. Or several farmers could coordinate to grow a crop according to a schedule that extends the harvest season – instead of all farmers harvesting their crop at the same time, farmers harvest in succession. This can prevent price drops when a crop is bountiful, and provide a steadier revenue stream for more farmers, while removing the risk of falling prices, and surplus product on the market
- Increasing sales to wholesale buyers, and decreasing reliance on farmers' market sales
- Being able to spend less time on distribution and transport, and more time farming
- Expanding their farm operations, and increasing revenues

In terms of land use, most farmers reported that they were already maximizing production on the land they had available to them. This isn't to say that the farmers interviewed had limited capacity in expanding their production, but that they were already maximizing production using their given resources. All farmers reported that they had expanded land production as they needed to over the years. Many farmers reported that they would like to scale up their operations, and would do so if the opportunity became available to them. Many farmers identified that increasing revenue through sales to wholesale buyers could help them to expand production of their operations. It is important to note that a farmer will only expand when it makes financial sense to do so. Removing some of the risks associated with expanding (Eg. by connecting farmers with wholesale buyers) can enable small/medium farmers to expand their operations, spend more time focused on farming, and acquire more land for production. Farmers can bring more product to market under certain conditions: if there are customers for their product, if they have the capacity to produce more product (access to land, labour, and other resources), and if the growing conditions (economically, and environmentally) are suitable.

Current Distribution Practices

The farmers interviewed were asked specifically about their current wholesale distribution practices. A general review of their comments is captured in the following table.

Of note: All farmers reported that they have been continually observing an increased demand from their wholesale buyers for locally grown farm product. This feedback confirms the large growth potential in terms of local food sales to the wholesale market.

Table 1: Farmers' Responses – Current Wholesale Distribution Practices

Farm Name, Location & Website	Wholesale Distribution Practices	Distribution Challenges
Bellman Specialty Produce Armstrong http://www.bellmannspecialtyproduce.com/	Sells to wholesale buyers (GFS, Sysco, Chronos) Relationship length: 8 years % of Revenue: 100% Arranges trucking companies to deliver to distribution centres	Finding trucking companies who would pick-up less than full-truckload loads
Taves Family Farm/Apple Barn Abbotsford (Fraser Valley) http://tavesfamilyfarms.com/	Sells through marketing agencies (Windset, Alder Farms, independent restaurants) Relationship lengths: 2-10 years % of Revenue: 100% for greenhouse products, and berries Has delivery trucks, self-delivers to the agencies. Restaurant buyer arranges to pick-up directly from the farm	Equipment maintenance Organizing full truck loads Minimizing trips
Urban Digs Richmond & Burnaby http://www.urbandigsfarm.com/	Sells to high-end restaurants in the Vancouver area Relationship length: 2 years % of Revenue: 60% with a growth projection upwards of 80% for 2014 Has one truck, self-delivers to the restaurants Sources product from other farmers to fill more orders, and increase sales	Self-delivery takes time away from farming Their current distribution model may not be financially sustainable –costs are subsidized, but only temporarily. There is an urgent need to aggregate resources for the truck costs.

	Farmers arrange pick-up/drop-off of product at pre-arranged locations	
Olera Farms Abbotsford (Fraser Valley)	Sells to home delivery food service (Spud) Relationship length: 10+ years % of Revenue: in past years <10%; in recent years, this has increased to 50% Has a non-refrigerated truck for self-delivery Borrows another farmer's truck, or asks another farmer to aggregate the delivery Fuel costs are shared informally	In need of a refrigerated truck, especially in the summer months
Rondriso Farms Surrey (Metro Vancouver) http://www.rondriso.com/	Sells to one restaurant buyer Relationship length: <5 years % of Revenue: 5% Restaurant buyer arranges their own pick-up from farm Currently sources product from other farms for sale through a Buying Club. Acting as a distribution hub, customers arrange to pick-up purchases from the farm, no delivery required. The club is modeled after a CSA, but without delivery	Lack of purchasing contracts, which would ensure revenue generation Distribution takes time away from farming High costs of fuel, delivery, and administration
Glen Valley Organics Abbotsford (Fraser Valley) http://www.glenvalleyorganicfarm.org	Sells to an organics distributor in Vancouver Relationship length: 10+ years % of Revenue: <5% Has a truck for self-delivery	Lacks enough appropriate drop-off points Difficulty in coordinating crop schedule, planning, farmer collaboration, logistics of transport
Crophorne Farm Ladner (Metro Vancouver) http://crophornefarm.com/	Sells to a food service company that uses the farm product directly Relationship length: <2 years % of Revenue: 2% Has a refrigerated box truck for self-delivery.	Lacks an efficient distribution pathway Lack of purchasing contracts, which would ensure revenue generation

The above responses help to demonstrate the wide variation in farming business models that exist throughout the community. The variation in distribution practices show how farmers have adapted to accommodate the various sales opportunities that may come their way. Opportunities are essential in terms of helping a farmer establish distribution pathways, and build new relationships with buyers. Many of the farmers listed above only have wholesaler relationships because they met, or knew a buyer through informal social networking avenues. The distribution challenges listed above will be discussed further in the following section.

Farmers’ Needs for a Distribution Model

The farmers interviewed were also asked about their distribution challenges in increasing their sales to wholesale buyers. The comments received were analyzed, and then carefully categorized into a “farmer’s need for a distribution model”. Hence, the first column of this table describes the farmers’ distribution challenge (based directly on their experiences), and the second column lists the corresponding farmer’s need. This table is shown below. Some repetition in the listing of Farmers’ Needs was necessary.

Table 2: Distribution Challenges and Farmers’ Needs – as identified by Farmers

Distribution Challenges – self-identified	Farmers’ Needs for a Distribution Model
Finding trucking companies who would pick-up less than full-truckload loads	Coordination of transport logistics Aggregation of product for more efficient transport/distribution
Equipment maintenance Organizing full truck loads Minimizing trips	Coordination of transport logistics Aggregation of product for more efficient transport/distribution Cost-sharing or shared risk management of high-value infrastructure (Eg. loading equipment, trucks, coolers etc.)
Self-delivery takes time away from farming Their current distribution model may not be financially sustainable –costs are subsidized, but only temporarily. There is an urgent need to aggregate resources for the truck costs.	Cost-sharing or shared risk management of high-value infrastructure Coordination of transport logistics
In need of a refrigerated truck, especially in the summer months	Coordination of transport logistics Cost-sharing of high-value infrastructure
Lack of purchasing assurance, which would ensure revenue generation Distribution takes time away from farming High costs of fuel, delivery, and administration	Coordination of crop planning, including harvest schedules Coordination of transport logistics Cost-sharing of high-value infrastructure
Lacks enough appropriate drop-off points Difficulty in coordinating crop schedule, planning, farmer collaboration, logistics of transport	Coordination of transport logistics Coordination of crop planning, including harvest schedules Assistance with marketing/sales, developing new sales relationships
Lacks an efficient distribution pathway Lack of purchasing contracts, which would ensure revenue generation	Coordination of transport logistics Coordination of crop planning, including harvest schedules Assistance with marketing/sales, developing new sales relationships

Recommendations for a Distribution Model

A short list of priority needs based on the small/medium farmers interviewed was generated from the interview findings. This list serves as a list of priority recommendations that small/medium farmers have identified as necessary for including in the design and development of a food hub/distribution model. In no particular order, this list of priority recommendations includes the following:

- Coordination of transport logistics
- Aggregation of product for more efficient transport/distribution
- Cost-sharing or shared risk management of high-value infrastructure (Eg. loading equipment, trucks, walk-in coolers etc.)

- Coordination of crop planning, including harvest schedules
- Assistance with marketing/sales, developing new sales relationships

This short list of farmers' recommendations for a distribution model should be utilized in designing and developing the food hub/distribution model.

The interview findings confirm that the flow of product from SMFs to consumers is significantly hampered by the lack of distribution infrastructure aimed at small/medium farmers. In determining how a distribution model can support small/medium farmers as valuable producers in the value chain, it is crucial to consider their perspectives. Farmers will expand their farm operations accordingly; however, a distribution model is urgently needed in order to help them grow their businesses. The main recommendation from this report is that in order to satisfy growing demands for local food, small/medium farmers will need distribution infrastructure that addresses their needs. The distribution model should include the items listed in the priority recommendations above. As well, the distribution model should ultimately help SMFs expand revenue streams by increasing sales to wholesale buyers. A food hub distribution model in this case can be used to help fix the local food distribution gap.

Additional Considerations

During the interviews, the farmers shared past experiences around distribution attempts and successes. From these anecdotes, a list of additional considerations formed. This information should be considered when designing and developing a food hub distribution model that serves to connect local food producers to wholesale buyers.

Bellman Specialty Produce started off selling directly to a well-established restaurant chain – this was initially made possible because the farm operator had previously worked as a Red Seal chef. Eventually, the restaurant chain asked their wholesale distributor to take over the sales relationship with the farmer, and this led to Bellman's farm products being carried by large wholesale distributors like Sysco and GFS. The lesson to be learned in this case is the value of relationships. Bellman had an existing relationship between a chef-turned-farmer, and a well-established restaurant chain. It was the strong partnership between the two parties that led to the sales relationship that exists between Bellman, Sysco/GFS, and the restaurant chain today.

Urban Digs Farm has numerous relations with high-end restaurants that want to purchase local farm product. However, Urban Digs was unable to produce the quantity necessary to fill the orders. In response, the farm operator started sourcing product from other farmers to fill large orders, which enabled her to maintain a high number of relationships with chefs. This has led the farm operator to becoming a part-time farmer, and part-time distributor, since she makes the delivery rounds herself. While this has been working in recent months, the farmer reported that this model is not financially sustainable in the long-run. Also, having to coordinate the distribution, and make the deliveries on her own time takes her away from on-farm activities, reducing capacity for her own production. The key consideration from this experience is the need for a distribution model that supports farmers by helping to organize, aggregate, and coordinate product, while managing sales from buyers, and also sharing distribution resources (Eg. driver, vehicle, cooler).

Urban Digs Farm and City Farm Co-op have extensive experience with using various types of software programs that could serve as a marketing service that connects farmers with more wholesale buyers. A shared marketing service also enables cost-sharing of the product amongst users, leading to minimal administration/coordination costs. A key consideration is the utilization of online software that provides a marketing service that meets the needs of the users (in this case the farmers, and the wholesale buyers). An online mobile tool (smart phone app) could also be considered to help farmers coordinate their purchasing orders and product distribution more efficiently. Oftentimes, software is designed to be used at a computer; however, farmers are rarely able to spend time at a computer. A key lesson here is considering the needs of farmers at every stage. If a software tool is to be incorporated as part of the model, it would be best to include farmers in early discussions.

Some farmers expressed concern around how their product would be marketed. In the SMF community, different standards exist around product quality, handling practices, packaging, storing, packing, traceability, labeling, food safety certification etc. The key consideration to keep in mind here is that farmers will need to be consulted at every step. Clear expectations will need to be established concerning all standards.

In talking to farmers, no tried-and-true models that had stood the test of time were identified. Most models that had been attempted were co-ops, or co-op-like, in that farmers worked together, and shared distribution/marketing costs evenly amongst those who contributed. Decisions were made together; sometimes disagreements occurred. Some farmers have stories that end in the loss of revenue, wasted/spoiled product, and disappointment. For the most part, groups disbanded over time. A key lesson that was identified by several farmers is the need for trust between members in the community. Failed attempts at farmer-run co-ops, or other shared marketing/distribution services have left some farmers wary of this idea. Building trust will be crucial: trust between farmers, and trust between farmers and other stakeholders (wholesale buyers, food hub managers etc.).

Based on the above, key lessons and considerations have been summarized as follows:

- The importance and value of farmer-buyer relationships
- The need for a distribution model that supports farmers by helping to organize, aggregate, and coordinate product, while managing sales from buyers, and also sharing distribution resources
- The potential utilization of online software that provides a marketing service that meets the needs of the users (in this case the farmers, and the wholesale buyers). An online mobile tool (smart phone app) could also be considered. The importance of considering farmers' needs at every stage, especially in software design and construction.
- The need for clear expectations to be established concerning all standards. Farmers will likely need to be consulted at every step.
- The need for trust between members in the community. Building trust will be crucial: trust between farmers, and trust between farmers and other stakeholders (wholesale buyers, food hub managers etc.).

Conclusions

Food hubs are increasingly being recognized as an emerging solution to distribution barriers, addressing aggregation, marketing/sales, and distribution services for small/medium farmers. The growing demand for locally produced food is widely acknowledged by industry, local food non-profits, and government – food hubs can help meet the needs of SMFs, while satisfying demand for locally produced food.

Interviews were conducted with farmers about their current distribution challenges. The challenges of external distribution for SMFs include the additional cost of paying someone to do this work, the preservation of a farm's brand, the potential for increased logistical complexity, and, if organized by farmers, the shared cost of additional infrastructure such as bigger trucks, or the rental of temperature controlled storage. Main benefits were identified: when distributors have the farmers' interests at the centre of their mandate, farmers can focus on farming rather than on coordinating logistics, marketing/sales, and transport/distribution. Additional benefits are that buyers can purchase unique local products, experience specialized services, minimizing risk through establishing mutually beneficial producer-seller relationships, and expanding farm operations, and increasing revenue.

The farmers' responses confirm that there is a clear need for coordinating an improved distribution model for small/medium farm product sales to restaurants, retailers, and other wholesale buyers. The flow of farm product from local farms to consumers is currently hampered by the lack of distribution infrastructure suitable for SMF needs.

The farmers' needs were identified as priority recommendations to be included in the design and development of a distribution model that suits SMFs. These recommendations include the following:

- Coordination of transport logistics
- Aggregation of product for more efficient transport/distribution
- Cost-sharing or shared risk management of high-value infrastructure (Eg. loading equipment, trucks, walk-in coolers etc.)
- Coordination of crop planning, including harvest schedules
- Assistance with marketing/sales, developing new sales relationships

Additional considerations were also identified and collected. These considerations include the following:

- The importance and value of farmer-buyer relationships
- The need for a distribution model that supports farmers by helping to organize, aggregate, and coordinate product, while managing sales from buyers, and also sharing distribution resources
- The potential utilization of online software that provides a marketing service that meets the needs of the users (in this case the farmers, and the wholesale buyers). An online mobile tool (smart phone app) could also be considered. The importance of considering farmers' needs at every stage, especially in software design and construction.
- The need for clear expectations to be established concerning all standards. Farmers will likely need to be consulted at every step.
- The need for trust between members in the community. Building trust will be crucial: trust between farmers, and trust between farmers and other stakeholders (wholesale buyers, food hub managers etc.).

The intention of this report was to provide an account of farmers' needs from a local distribution system. The interview findings confirm that the flow of product from SMFs to consumers is significantly hampered by the lack of distribution infrastructure aimed at small/medium farmers. In determining how a distribution model can support small/medium farmers as valuable producers in the value chain, it is crucial to consider their perspectives. Farmers will expand their farm operations accordingly; however, a distribution model is urgently needed in order to help them grow their businesses.

The main conclusion from this report is that in order to satisfy growing demands for local food, small/medium farmers will need distribution infrastructure that addresses their needs. The priority recommendations identified can be used in helping to guide the design of a distribution model. Essentially, the purchasing of farm products needs to be simple and well coordinated to accommodate the needs of both farmers and buyers. As well, the distribution model should ultimately help SMFs increase sales to wholesale buyers. Closing the distribution gap that currently exists will help to satisfy increasing demand of local farm product in the region and beyond. A food hub distribution model in this case can be used to help fix the local food distribution gap.

Appendices

Appendix A: Interview Questions for Farmers

- (1) What agrifood products do you sell?
- (2) What % of your farms' arable land do you have in production (include land that is part of the fallow crop rotation).
- (3) Who are the WHOLESALE customers that buy directly from you and their location/city. If you have many, just list the top 5-10. *Information will be kept confidential.*
- (4) How long have you had these relationships?
- (5) How have these relationships changed since you began? Have you observed any trends? For example, any general trends in increasing or decreasing purchases? Are there specific variables that affect relationships?
- (6) What is the economic value of these relationships? Are you able to quantify this value somehow? Eg. % of total sales, or other measure.
- (7) Is your farm currently CanadaGAP or HACCP certified? If not, would certification help you to reach new customers?
- (8) How do you currently distribute your products to wholesale/retail buyers? Break down each sector by % of revenues.
- (9) For an average week, how much time (in hours) do you spend on travel and delivery?
- (10) What challenges do you face with each of these distribution means?
- (11) Do you have any ideas/suggestions on how these challenges can be overcome?
- (12) Have you ever **DELIVERED** products to retailers/restaurants as part of a group of farmers? Is the group still operating?
IF YES:
 - (13) How many farmers are/were in the delivery group?
 - (14) How did delivery work?
 - A. Delivered to one central point and loaded truck.
 - B. One driver picked up from each of the farms.
 - C. Combination of A and B.
 - D. Other – Explain:
 - (15) What was the structure of the farmer group?
 - A. Casual: farmers could come and go as they wished. Individual farmer's equipment, trucks, storage were shared with group. Costs were shared.
 - B. Collective: farmers made decisions together, shared costs and owned equipment together. Products were sold by the individual farmers to the buyers.
 - C. Aggregation: Farmers sold products as a group, and had common pricing for products they grew in common. Farmers made decisions together, shared costs and owned equipment together.
 - D. Entrepreneurial: One farmer had the truck and storage and charged other farmers for the delivery service.
 - E. Other: Explain
- (16) If the group is no longer operating, why not?
- (17) What 3 key learnings can we gather from your experience with the group? For example, problems with invoicing, coordination, range of product etc.?

(18) How were the costs of the group covered? (Eg % of revenues, % margins, membership fee etc). Were costs split evenly?

IF NO:

(19) Can you see any benefits to group delivery?

(20) Can you see any challenges to group delivery? Potential solutions to these challenges?

(21) Have you ever **SOLD** products as part of a group of farmers?

IF YES:

(22) How many farmers are/were in the selling group?

(23) How did you invoice?

- A. Individual invoices for each farmer
- B. Combined invoices with farmers identified
- C. Combined invoice no farm identification
- D. Other – Explain:

(24) How did the group market the products to new and existing customers?

(25) Was there one representative or multiple? Did each farmer still do their own marketing, or was marketing combined? What was the mixture of the approach?

IF NO:

(26) Can you see any benefits to group selling?

(27) Can you see any challenges to group selling? Potential solutions to these challenges?

(28) Would/does group DELIVERY, and/or SELLING help increase your farm's INCOME?

(29) Would/does group transportation/distribution and/or SELLING help increase your farm's PRODUCTION?

(30) Would/does group transportation/distribution and/or selling help to put more land into production on your farm?

(31) Would your farm be appropriate as a drop point for a group delivery? I.e. Do you have/could you have storage, a (refrigerated) truck that could be shared?

(32) Would you be interested in learning more about the small farm distribution model?

(33) Would you be interested in participating in a pilot version?

(34) Can you suggest other farmers we should contact?

(35) (If not already mentioned) Would an aggregation type service help, where neighbouring farms aggregate their product together and deliver it using one truck? If so, why? If not, why not?