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THE ECONOMY OF LOCAL FOOD IN VANCOUVER



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THE ECONOMY OF LOCAL FOOD IN VANCOUVER

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Executive Summary

The food system within Metro Vancouver is responsible for feeding more than two million people on a daily basis. The region's population is expected to grow substantially over the next thirty years, which means the system will need to keep pace. However, the region's seasonal production limitations, coupled with demand for its horticultural products from around the globe, have created a system reliant on a predominantly imported food supply. Industrial conglomerates from California and Mexico enjoy significant cost, economies of scale and efficiency advantages over local producers. Further, they demand local buyers to accept supply on a year-round basis, which shifts power into the hands of imported producers. As a result, the food system's dependency on imported food has made the local region less self-sufficient and places food security at risk.

Constraints within the imported or 'mainstream' food system have provided incentives for local producers to grow high value crops, which has helped create a valuable export market. These high value crops, such as blueberries, are partly produced because of high land costs in Metro Vancouver that make certain crops unprofitable to sell in the domestic market. Subsequently, some domestically produced crops are labeled as 'boutique', which translate to higher selling prices. However, as the price of fuel directly impacts the cost of transportation, imported suppliers could be forced to increase the cost of their crops, which would bring the price gap between local and imported producers closer.

The Agricultural Land Reserve (ALR), which recognizes agriculture as a priority use in dedicated zones, supports local food production in British Columbia. Compared with imported produce picked before ripeness and shipped long distances to Metro Vancouver, horticultural products from the ALR are shipped short distances when ripe. As a result, efficiently distributed local production reduces greenhouse gas emissions (GHG), and reduces the cost of transportation and the 'real cost' of carbon to the environment.

Consumer demand for locally produced food is best evidenced through the strong financial performance of Vancouver Farmers' Markets. In recent years, vendor receipts have grown to create over \$10 million of economic activity for the local economy. Secondary rounds of spending because of the markets are shown to benefit employment (jobs, wages) as well as adjacent business revenues. From a producer perspective, farmers' markets provide an opportunity to sell direct to consumers and can provide better financial returns. Contract crop production, like Community or Restaurant Supported Agriculture (CSA/RSA) is another form of direct marketing, but is slow to be adopted. The success of farmers' markets has been achieved despite facing challenges in operational capacity and restrictive regulations.

Farmers' markets and retailers have also benefited from increasing consumer demand of value-added or 'artisanal' type products, which typically have higher margins than minimally processed crops. However, in recent years, food-processing activities within Metro Vancouver have deteriorated

in favour of other regions with lower cost structures. This movement has left a gap in the food system, which, because of required capital and capacity, is difficult for local entrepreneurs to fill and further contributes to food waste.

The mainstream food distribution network, similar to the food supply network, is controlled by large distribution and wholesale companies that feature imported food. Supermarket chains operate their own distribution facilities and a concentrated, independent wholesale network serves the fragmented retail marketplace. From a restaurant and hotel perspective, two large food service distribution companies control approximately two-thirds of the market share in Metro Vancouver. Because of the food system's concentration of power, alternative distribution companies have emerged, which place greater emphasis on supporting local producers, but lack infrastructure and value chain linkages to create significant economic benefits.

Infrastructure investments, such as storage and equipment, can be cost prohibitive for producers because of the cost and limited relative use that comes from seasonal production. The highly fragmented network of small farms also creates barriers to scale up local production at a critical mass level. However, the distribution community is beginning to invest in local producers by educating them of buyer expectations (grading, packaging, labeling) for crops. Technological infrastructure also impacts crops; for example, hydrocooling can greatly extend crop shelf life and is efficiently utilized within the mainstream food system.

The local food system lacks effective linkages with value chain partners, who inherently favour the mainstream system because of its simple, uncomplicated and established structure. Supermarkets, restaurants, and institutional buyers acknowledge that greater support of local producers will add layers of complexity to their operations because of increased administration costs and concerns over food safety. Thus, a general lack of enthusiasm to support local producers is present. Additionally, a parallel ethnic food system that is heavily influenced by an established Asian network contributes to a segregated food system within Metro Vancouver. Barriers in language and cultural practice reinforce a 'business as usual' approach, which continues to favour existing supply connections. Overall, connections between local producers and large-scale local sales opportunities need to be improved, though some progress is being made in this respect through the Local Food First network.

Portland, Oregon, a region known for its commitment to local food, is a good benchmark for a successful local food system. Much like the City of Vancouver and the ALR, Portland has an urban growth boundary that outlines specific areas for agriculture production. Coupled with a greater ability to produce year-round and strong consumer demand, food entrepreneurs have formed crucial connections and linkages that influence food policy for the region today. These linkages have created effective infrastructure that enable food system actors to efficiently operate within a locally

demanding marketplace. Through dedicated investment, non-governmental organizations and local advocacy groups provide institutional buyers with incentives to procure local, which limits economic leakage to other regions. Many of these value chain actors also seek to reduce their impact on the environment by embracing sustainability as a core principle to their operative structure.

Similarly, Vancouver's Granville Island is a model where a supportive local food infrastructure showcases the abundant food offerings to over 12 million annual visitors. Its management supports local producers by providing space to sell unique, high quality crops that increases local demand, builds production capacity and creates additional customer traffic. Granville Island is successful in part, because of its infrastructure and profile, which advances the local food trade and provides strength to the city's international acclaim.

Despite some of its weaknesses, the food system in Metro Vancouver is beginning to display strengths similar to that of Portland. Consumer demand is driving food buyers to make incremental changes in favour of local food procurement. The distribution network is starting to work with producers to mutually benefit operations, which also provides benefit to the environment as it redirects supply away from distant growing regions. Local advocacy groups are taking greater leadership in advancing the local food trade through effective partnerships with public and private entities. For example, Local Food First is championing the connection of neighbourhoods through a food 'hub', which is envisioned to include a permanent farmers' market, distribution/storage centre and food processing capacity. The hub will also foster an exchange of ideas between local food actors to create a more robust local food economy. The Vancouver Food Policy Council also directly contributes in this space as it works directly with the City of Vancouver on food-related issues and initiatives.

Recommendations

Many different parties will need to cooperate to achieve a more profitable and sustainable local food system that makes better use of existing production by ensuring more of it reaches local shelves. Public institutions can assist producers and farmers' markets by easing regulatory barriers and starting procurement initiatives. The private sector will determine success, and it remains to be seen whether Vancouver farmers, restaurants, retailers and others can build the linkages and partnerships that have been critical to success in regions such as Portland. The Local Food First network has begun the work of filling gaps and building linkages, but will need widespread support across the value chain to build a strong local food system.

Distribution

Stronger distribution linkages are the key requirement in getting local food to market. This can be achieved if the private sector (building on the work of Local Food First) can open up existing or create new distribution channels.

- › Provide access for local farmers to intermediaries and

distributors

- › Create storage facilities to store crops and extend the selling season
- › Utilize web resources to connect buyers and sellers real time
- › Assist local producers with investments in technology that lengthen product shelf life
- › Create database that maps all value chain members and their respective needs

Farmers' Markets (FM)

Fewer restrictions and market permanence are central to fostering growth for farmers' markets in Vancouver. The City of Vancouver, the Parks Board, the Vancouver School Board and Your Local Farmers' Market Society need to partner and cooperate to make markets an integral part of a livable, sustainable city.

- › Reduce restrictive regulations that constrain farmers' market (FM) operations (signage, access to electricity) and create permissive bylaws based on specific FM needs
- › Provide longer-term leases to establish markets and avoid high switching costs
- › Expand network to downtown location during the work week
- › Provide tax breaks to businesses that assist farmers' markets (parking, storage)
- › (Along with Local Food first partners) develop hub concept, including a resilient business plan, strong partnerships, and long-term capital campaign
- › Capitalize on economic benefits of farmers' markets and strategically locate markets to meet the needs of underserved areas in Vancouver
- › Build relationships with retailers/restaurants to jointly promote local supply
- › Create a market sponsorship strategy to strengthen operations
- › Link community organizations with farmers' markets to support health

Restaurants & Food Retailers

Retailers and restaurants can create partnerships local producers by promoting their products within their operations, building on a successful value proposition from other jurisdictions.

- › Partner with farmers to create joint promotions that feature local products
- › Build partnerships with farmers to build local capacity through improved Restaurant-Sponsored Agriculture (RSA) adoption
- › Create an alternative RSA / CSA (Community supported Agriculture) design to share up-front costs and improve cash flow
- › Partner with farmers' markets to build local capacity and make them central to the selling proposition, as is common practice in Portland
- › Feature local producers within the restaurant / retail communications – build local brand

Institutional Buying

Large public institutions can improve their supply of healthy local food through procurement initiatives that build local capacity and build on existing institutional resources such as warehousing facilities. Vancouver Coastal Health, the Vancouver School Board, the City of Vancouver and the University of British Columbia are candidate institutions.

- › Communicate with distributors and wholesalers to improve local sourcing
- › Specify a certain percentage of supply to come from local producers
- › Connect with other institutional buyers to increase scale and lower individual cost of the two above recommendations
- › Link institutional purchase managers with alternative suppliers such as farmers' markets
- › Introduce local food requirements for public institutions and encourage private institutions to change procurement policies
- › Increasingly coordinate schools with local farms to educate children and supply farmers with access to direct sales

Food Processing

Linkages between producers and processors are critical to rebuilding the area's processing infrastructure, building on work underway through the Local Food First network.

- › Better utilize existing processing infrastructure (i.e., kitchens) to reduce waste and retain local investment
- › Connect with producers and encourage contract crop production for processing that can be used with 2nd grade products
- › Provide incentives for primary and value added entrepreneurs through grants

Producers

Farmers will need to better educate themselves about local sales and partnership opportunities in order to access the higher-value local market.

- › Provide financial and educational support for local farms to build capacity and enter the mainstream supply chain
- › Ensure knowledge exists across the industry on processing, packaging, grading, traceability, health and safety, and other requirements of large-scale production
- › Connect with local food processors to utilize 2nd grade field crops
- › Create incentives for distributors and wholesalers to serve the local, independent market, and support a dedicated agent to manage local growers
- › Create farm partnerships to share in packaging and transportation costs



PHOTO: GEA REFRIGERATION

1. INTRODUCTION

The Vancouver Economic Development Commission, as part of its efforts to develop an Economic Development Strategy for the City of Vancouver, has commissioned research into the economics of the local food system that will inform its recommendations to Vancouver City Council. The following is a brief summary of the major issues in the current system, along with recommendations to strengthen the system through a more effective utilization of local food and entrepreneurial spirit.

1.1 The Food System in Vancouver

The food system in Vancouver, comprised of food production, processing, distribution, consumption and waste management activities, has the responsibility to feed nearly 615,000 people within Vancouver and another 1.7 million in the communities that encompass Metro Vancouver.ⁱ The main components of this system are concentrated among large companies that control market share and in turn, the greater proportion of wealth. Consumer demand, annual growing limitations in Metro Vancouver and profit incentives have formed a system reliant on imported commodities and has reduced self-sufficiency for the region and British Columbia (B.C.) as a whole.

Due to seasonal production, an estimated annual gap of 1.3 million tonnes exists between total food consumption and local food production capabilities in Metro Vancouver. Consumer demand for worldwide horticultural products has made B.C. approximately 48% self reliant among major food groupsⁱⁱ and further places the local food system at risk. Sudden closure of the border would leave the region with just three days of fresh fruit and vegetables, affecting public health and economic investment.

The Agriculture Land Reserve (ALR)¹ also impacts B.C. food production, which restricts residential, commercial and industrial development and encourages agricultural production in designated regions. Most employable agriculture land in the ALR is actively farmed, although an estimated 6% (6,000 to 7,000 acres) is idle or unused.ⁱⁱⁱ Products grown within the ALR are highly associated with quality because they are picked when fully ripe and delivered quicker than products from imported regions. While imports are also perceived as high quality, they are picked far before reaching a ripe stage and are transported over 2,000 km before it can be consumed.^{iv} With the population in Metro Vancouver expected to rise from 2.2 million in 2006 to 3.3 million in 2040^v, demand for food will increase at roughly the

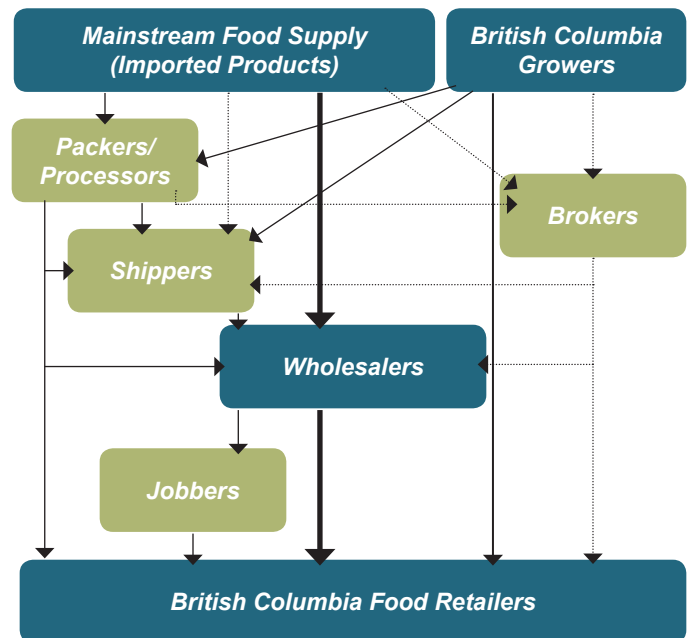
same rate^{vi}, which will create opportunities to improve the food system.

Current Food System Design: Retail Structure

The current retail supply structure is designed to meet consumer demand through a web of interconnected market actors that balances local and international supply. With respect to local distribution of vegetables, wholesalers have limited options to serve the retail food sector. Local seasonality of specialized production creates a valuable export market, which utilizes imports to supply remaining product demand. Thus, approximately 20% of locally consumed vegetables come from local sources.^{vii}

In 2005, retail food sales in British Columbia accounted for 60% of total commercial food sales.^{viii} The B.C. food supply chain, as illustrated in Figure A, is simplified to show the relative impact of growers from outside of and within British Columbia.

Figure A: Producer to Retailer Supply Chain Overview in B.C.



Adapted from: Novacorp Consulting Inc. 2006. Guidelines for BC Food Producers & Processors on Selling to Food Service Distributors. Report prepared for the BC Ministry of Agriculture and Lands. http://www.al.gov.bc.ca/foodprocessing/documents/foodservice_market/final_fsd_marketing_sales_manual.pdf

Most of the Lower Mainland's horticultural production (69%) passes through wholesalers, where it is, at the very least, graded and packaged.^{ix} Wholesale distribution centres are either owned by large retail chains (Overwaitea Food Group, Safeway, IGA) or by other large, private companies without direct retail ownership presence. Many of these wholesalers are located in East Vancouver, concentrated along Malkin Avenue. It is estimated that large retail chains control 65% of supply, while other wholesalers direct the balance. Depending on the capacity and needs of the

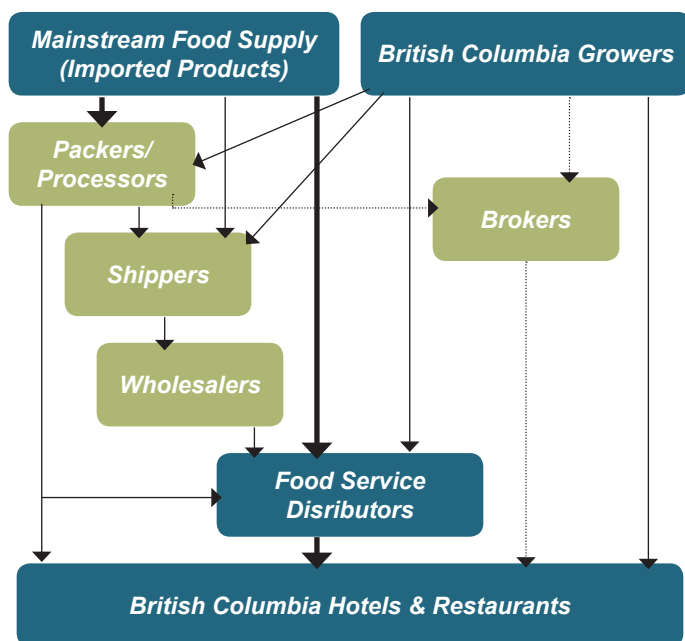
1 The Agriculture Land Reserve (ALR) is a provincial zone in which agriculture is recognized as its priority use. Farming is encouraged, and non-agricultural uses are controlled. The ALR covers approximately 4.7 million hectares, and it includes private and public lands that may be farmed or forested, as well as vacant land. It comprises those lands within British Columbia that have the potential for agricultural production. Source: Anthony Brunetti. RE-LOCALIZING HORTICULTURAL SUPPLY CHAINS IN LOWER MAINLAND, BRITISH COLUMBIA, CANADA: AN EXPLORATORY STUDY OF MARKET BARRIERS AND OPPORTUNITIES. Doctoral Thesis; University of British Columbia. February 2009. (B.C. Agricultural Land Commission 2004).

producer, wholesaler or retailer, other supporting firms may become involved. Brokers, shippers, processors, packers and jobbers collaborate to efficiently move the aggregated mix of commodities. Many of the supporting firms are well established and utilize specialized equipment to prepare goods for the retail market. While Figure A depicts a well functioning supply chain, it also illustrates B.C.'s reliance on imported regions (California and Mexico) to meet consumer demand.^x

Current Food System Design: Hotel and Restaurant Structure

As nearly two-thirds of commercial food sales (60%) came from retailers in 2005, food service establishments accounted for the remaining 40%. The bulk of food service sales (90%)^{xi} are concentrated among Food Service Distributors (FSD's) that source directly from farms or value added producers. Similar enterprises that support wholesalers in the retail stream (processors, packers and shippers) also assist FSD's to deliver goods to restaurants and hotels. Two large FSD's, Sysco and Gordon Food Services (Neptune), command between 60 and 65% market share. The network is illustrated in Figure B and shows relative market shares between local and imported food supplies.

Figure B: Producer to Restaurant Supply Chain Overview in B.C.



Adapted from: Novacorp Consulting Inc. 2006. Guidelines for BC Food Producers & Processors on Selling to Food Service Distributors. Report prepared for the BC Ministry of Agriculture and Lands. http://www.al.gov.bc.ca/foodprocessing/documents/foodservice_market/final_fsd_marketing_sales_manual.pdf

Food Waste

Given the perishable nature of food, waste is inevitably generated – most of which occurs at the producer level. Statistics Canada categorizes waste as ‘disappearance’ and tracks ‘food availability’, which refers to food fit for human



PHOTO: B NICHOLSON

consumption after losses have been adjusted for.² On average, it is estimated that 50% or 1,645,430 tonnes (2005) of fresh food disappears within Metro Vancouver before it reaches the consumer.^{xii} Food waste is calculated on a federal basis and is not measured provincially. Therefore, it is assumed that B.C. and Metro Vancouver are representative of Canadian statistics. It should be noted, however, that estimates are used to determine food availability figures, which makes data experimental. Regardless, the magnitude of food waste is important, as even slight reductions could yield significant economic benefits.

Figure C illustrates vegetable disappearance by category, derived from a report by Statistics Canada. The greatest opportunity to reduce waste is within the fresh vegetable category, as over 90% of total disappearance comes from this group.

Figure C: Food Availability - Vegetables by Major Group
Annual Kilograms per Person

	Fresh	Canned	Frozen	Juice	*Total	Fresh/ Total
Total Available	137.62	12.8	5.71	1.33	178.21	
Adjusted after Loss	67.72	10.83	4.46	1.13	101.5	
Loss Amount	69.9	1.97	1.25	0.2	76.71	91.12%
Loss %	50.79%	15.39%	21.89%	15.04%	43.04%	

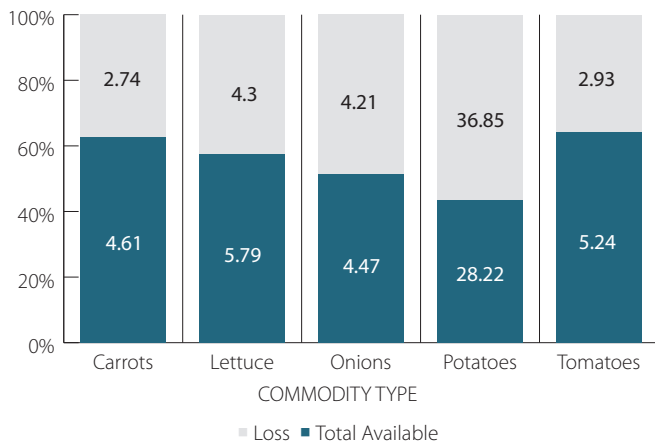
* In fresh, equivalent weight. Source: Statistics Canada, Food Statistics 2007 – Catalogue no. 21-020-X

Furthermore, the report specified major fresh vegetable availability per capita in Canada; with the top five illustrated in Figure D on the next page. Potatoes represent the

² Food available for consumption and is derived residually using supply-disposition tables. All components of supply are added together and all uses (disposition) other than human consumption are deducted. The resulting amount is assumed to be available for human consumption. Loss of food at the retail and household level is not calculated in the measure. Source: Statistics Canada Food Statistics 2007.

greatest amount of estimated loss at 57% (36.85 million kg). Adapting these figures among the top five commodities for the City of Vancouver translates to an estimated, aggregated disappearance of 31 million kilograms, with 72% of this coming from potatoes.³ Attempts to better understand specific value chain needs could reduce waste and provide better fresh and processed food sales opportunities.

Figure D: Five Most Available Fresh Vegetables in Canada
(Annual kilograms per person)



Source: Statistics Canada. Food Statistics 2007 - Catalogue no. 21-020-X

As mentioned earlier, the City of Vancouver and surrounding municipalities are forecast to experience significant growth by the year 2040. This growth will demand greater flexibility and functioning of current systems that must contend with land availability, seasonal growing capacity and consumer demands. Effective local land utilization and food waste management represent opportunities to increase food security and provide better economic returns to food system actors in Metro Vancouver.

1.2. Distribution

Distribution activities are central to maintaining a robust food economy that provides consistent supply to meet consumer demand. The current mainstream distribution network, while fragmented and complicated, is also rigid in its design. Large established networks operate independently from one another, with long-established supplier relationships based on low cost, large volumes and consistent quality. Therefore, small producers are faced with high barriers to entry and must build relationships with distributors and wholesalers to gain market access.

An alternative distribution network also serves the market, but lacks scale advantages and consistent supply that the mainstream system enjoys. Producers connect with consumers at venues like farmers' markets^{xiii}, a direct marketing system that competing wholesalers perceive as a limited threat to their business.^{xiv} Issues that affect distribution are relationships, processing, education, safety, logistics and transportation.

³ Individual commodity loss per capita was multiplied by the number of people in the City of Vancouver and aggregated among the five commodity types. Vancouver population: 615,473. Source: <http://www.bcstats.gov.bc.ca/DATA/pop/pop/estpop.asp?totpop>

Distribution Relationships

Many large California and Mexico producers will not supply Vancouver distributors on a seasonal basis and instead demand year-round purchases that further solidify the food system's inflexible nature.^{xv} Moreover, it is estimated that less than one-third of ingredients sold by large FSD's are from B.C.^{xvi} – and approximately 25% for retail wholesalers.⁴ However, large distributors, such as Neptune and Sysco, are making incremental changes to their procurement policies as a response to customer demand. For example, Neptune is working with five area farms to reduce costs, guarantee supply and meet demand for local products.

Asian Networks

Alongside the mainstream distribution and wholesale network, a parallel ethnic supply chain thrives in Metro Vancouver, which reinforces the system's rigid design. Dominated by Asian wholesalers, the system is characterized by strong business relationships between inclusive members. Many producers lack the ability to speak English that provides language savvy wholesalers with a constant pipeline of supply – to be distributed to buyers that demand niche or specialty crop products.

Food Processing

Producers of any size are subject to the same regulations regarding market access of their primary processed commodity or value added product. Over time, large producers have been able to invest in infrastructure and equipment assets that create market-ready products. Conversely, many small producers and non-sophisticated suppliers lack the ability to efficiently and consistently grade, package and prepare products for market sales.

For crops determined to be cosmetically inferior or second grade, access to processing options are few. Farmers are either not aware of, or have not made attempts to connect with horticultural processors in Metro Vancouver. Select processors have operational capacity and could create value added products for the market, while also reducing food waste.

Education

Lack of producer education partly explains market access barriers and food waste. One small organic distributor in Vancouver, Discovery Organics, is educating small producers with a manual that details buyer requirements.^{xvii} The manual contains specific information to prepare goods for final sale, such as grading, packaging and safety requirements. Thus, producers can also plan better for direct sales opportunities like farmers' markets and community or restaurant supported agriculture (CSA / RSA's).⁵ A study based out

⁴ Malkin Avenue Wholesaler – estimated 25% local, year-round supply. Wholesaler would be willing to procure more local if price and quality improved. May 15, 2009.

⁵ CSA/RSA's offer seasonal supply of fresh, reasonably-priced produce (often grown using organic methods); direct relationship with the farmer growing their food; an opportunity to learn about agriculture and local ecosystems; and a community-building connection with farmers, neighbors and landscapes. Source: http://www.leopold.iastate.edu/pubs/staff/files/csa_0105.pdf



PHOTO: ATUL666

of the Midwestern United States revealed that contracts, which require up front payment, provided CSA farmers with an average net return of \$2,467 per acre.^{xviii} This figure is very high when compared with an average net return per acre of \$114.89 (same study) and would allow producers an opportunity to invest in their business and build capacity for further market sales. Corporate policy can also influence local support. For example, the Happy Planet juice company has a policy to procure 60% of its ingredients from local sources.

Food Safety

Food safety issues underpin fresh and processed food sales. Appropriate washing and handling procedures, unbroken cold chain activities and product traceability steps must be followed to help mitigate public health issues like the spinach e-coli incident of 2006. The event caused 22 illnesses at Taco Bell restaurants and forced the temporary closure of eight restaurants. This resulted in substantial lost revenue and public uncertainty of the Taco Bell brand.^{xix}

Storage Facilities

Cold and dry storage facilities can provide producers with access to market opportunities that extend the selling season, such as refrigerated / frozen sales. However, the cost of storage facilities can provide disincentives for local producers to expand operations, which allows existing, mainstream value chain members to maintain influence and market share.

Transportation, Logistics and Technology

Similar to storage infrastructure, other technology can provide benefits to the life of a product. Hydrocooling⁶ can lengthen product shelf life and provide valuable, additional time in the transportation cycle for unintended transportation issues like

6 Hydrocooling is a technique where the vegetable is cooled by direct contact with cold water flowing through the packed containers and absorbing heat directly from the produce.

border delays and equipment malfunctioning. Because of this, large wholesalers contend that imported products on average, have a shelf life of seven to eight days while local products have just two to five days.^{xx}

While technology enhances product shelf life and profitability, transportation costs are explicitly tied to the price of fuel and can negatively impact financial gains. For a typical 35,000-pound shipment, trucking costs run \$5000, which amounts to roughly 7 cents per pound.^{xxi} Greenhouse gas emissions (GHG's) further add to transportation costs by articulating a 'real cost' to society. Environmental externalities add 3% to the cost of local-organic food and 16.3% to the cost of conventional-global food.^{xxii} Despite transportation cost disadvantages, large-scale farm production provides higher margins that continue to foster imported supply dominance.

Summary

Actors within the distribution system face a myriad of issues when supplying the complex marketplace in Metro Vancouver. Large international farms and seasonal domestic growing conditions heavily influence the mainstream supply chain, which makes imported supply the central source of fresh fruit and vegetables. Local producers face financial obstacles to effectively compete and a select few are beneficiaries of growing support from wholesalers and distributors. These educational and economic investment mechanisms are key for producers to build capacity and gain access in the sophisticated market.

1.3 Farmers' Markets

Farmers' Markets in the City of Vancouver have been widely supported by the general public over the last four years, enjoying 30 – 35% annual growth. These markets provide a crucial linkage between producers (60% must be agriculturally based)^{xxiii} and consumers that promote awareness of, and appetite for, local food. The markets also offer niche, value added products that represent ingenuity from the farmer and heighten the consumer experience. At peak times, farmers' markets operating under Your Local Farmers Market Society (YLFMS)⁷ receive over 10,000 visitors per week, which equated to vendor sales of nearly \$4 million in 2008 – an increase of \$1.1 million from the previous year. A recent study analyzing the impact of this sales revenue reveals an overall impact of \$10 million to the local and regional economies.^{xxiv}

Vancouver based studies point to nearly three quarters of the population that are willing to pay a premium for Canadian grown products, if they knew the premium would go to Canadian farmers.^{xxv} Whether organic or local, consumers are willing to pay a price premium that often commands 25% more than conventionally grown produce.^{xxvi} The markets create vibrant neighbourhood centres and influence other channels in the value chain by stimulating demand for local goods. Current conditions of the network are strong, however future success is dependent on improving market permanence, capacity, locations and operational regulations.

7 YLFMS is also known as Vancouver Farmers' Markets (VFM).

Market Permanence

Farmers' markets, when held in public spaces, are subject to re-location risk. Market space could be withdrawn by the city to fulfill municipal obligations or provide opportunities that run counter to farmers' market success. All market locations must apply for annual leases, which is unlike other municipalities in the province. Lack of market permanence also prevents long term planning and the ability to attract quality farmers. As a result, the Executive Director spends 50% of their time applying for market licenses and permits, each year. At the same time, leases from private landholders can lapse and place the society at risk for future operations. When a market is forced to re-locate, YLFMS faces costs between \$25,000 and 35,000 due to increased advertising, labor and administration expenses.

Market Capacity and Locations

Successful farmers' markets have created more demand from vendors than can be accommodated at market locations, which is stifling growth opportunities. In addition, areas within the city are underserved, in part because of reliance on the existing system and in part of extensive city regulations that limit permissible farmers' market zones. In future, locating farmers' markets closer to neighborhood-level retail and Business Improvement Association zones would create more synergies with local retailers (see below) and create vibrant neighborhood hubs. Vancouver's Summer Spaces program and neighborhood street closures are providing an opportunity to test this in Vancouver's Gastown neighborhood.

Operational Regulations

The regulatory framework is complicated, given three separate levels of government involved with authorizing and regulating public markets. The Vancouver School Board, City of Vancouver Planning / Engineering Department and the Vancouver Board of Parks and Recreation all can play a role in affecting operations of current markets and locations of future markets.

Restrictions based on signage are one of the biggest operational barriers that the farmers' markets face. Rather than providing YLFMS with signage consent, city officials 'turn a blind eye' to this advertising method, which re-enforces market uncertainty. Parking, public health & safety issues also impact the markets' ability to attract customers and provide sales opportunities to vendors. Permissive bylaws around locations and signage would enable YLFMS to better serve the community and all stakeholders involved with the farmers' markets.

Farmers' Market Economic Impact

Farmers' markets provide the local economy with many functional and emotional benefits. Numerous studies (see below) illustrate how the local economy benefits from direct and indirect spending at markets, rather than supporting

chain stores and restaurants that source outside of the local market and leak revenues back to head offices locations. The following cases illustrate the effect that farmers' market spending has on the local economy.

Farmers' Market Case Studies

→ Case Study 1: UNBC Consumer Focus^{xxxvii}

A University of Northern British Columbia (UNBC) study attempted to quantify the impact of farmers' markets in B.C. The study analyzed consumer surveys to estimate benefits of markets and forecast economic benefits to adjacent businesses from increased pedestrian traffic at the farmers' market.

Results: Farmers' markets were found to create total province wide activity of \$65.3 million (based on direct spending of \$32.63 million and a multiplier of 2.0.)⁸ Equally important is the effect that farmers' market traffic has on adjacent business. On average, consumers spent an additional \$19.22 at businesses located near the markets for a total of \$53.3 million. The study also revealed that nearly 80% of market visitors came to the area because of the markets.

→ Case Study 2: Vendor Focus

The US-based Project for Public Spaces' report, *Estimating the Economic Impact of Public Markets*^{xxxviii}, considers economic impacts from the perspective of a market purveyor (fresh food or prepared). American farmers' markets were assigned to categories based on population and analyzed according to purveyor expenditures. According to the study, Vancouver would be considered a large city (greater than 1 million inhabitants) and therefore, highlights are selected based on that criterion. Figure E explains average annual expenditures per vendor type and the related effects of those expenditures in the local area.

Figure E: Large City Market Information

Large City Market

Vendor Type	Number of Vendors	Average Expenditures	Market Spend	Large City Vendor Impact Multiplier	Total Impact
Producers	20	\$1,252	\$25,040	0.11	\$2,754
Non-producers	5	n/a	n/a	n/a	n/a
Prepared Food Vendors	8	\$128,382	\$1,027,056	1.61	\$1,653,560
Other types	13	\$55,548	\$722,124	0.68	\$491,044
Vendor Total	46		\$1,774,220		\$2,147,359
Market Management			\$100,000	2.27	\$227,000
Market Total					\$2,374,359

Result: The overall impact of one large city farmers' market is estimated to amount to over \$2.3 million per year – which

⁸ Provincial market spend was \$32.63 million. Researchers estimated the multiplier to be 2.0 based on other research reports and are experimental. Multiplier refers to the amount of extra investment in the community from an initial spend. E.g. a multiplier of 2.0 denotes that for every dollar spent in a market, an extra dollar is re-spent within the community.

includes direct, indirect and induced spending resulting from vendor involvement. This is close to the amount generated by Vancouver's Trout Lake Market.⁹

→ Case Study 3: Growing Portland Farmers' Markets^{xxix}

A Portland study measured the impact of five farmers' markets in terms of direct, indirect and induced activities.¹⁰ The total economic impact from spending at these five farmers' markets in Portland was \$11.2 million – illustrated in Figure F. Thus, the result of \$7.7 million in direct spending at these five markets spawned an additional \$3.5 million of indirect and induced purchases. Figure F also relates the markets' impact on employment for the region, supporting 95 employees earning nearly \$2 million in wages.

Figure F: Total Impact at Five Prototypical Portland Markets (2007)

5 'Typical' Portland Markets: Hillsdale, Hollywood, Lents, Motaville, PSU

	Direct	Indirect	Induced	Total Impact
Output (\$)	7,702,434	2,144,381	1,350,409	11,197,224
Employment (FT & PT employees)	69.20	14.80	11.60	95.60

The study also analyzed the impact of a dollar spent on imported products at a traditional grocery store¹¹ compared with a farmers' market. Most of the farmer's economic impact is not retained locally and is 'leaked' outside of the local economy. Through the utilization of IMPLAN^{xxx}, it is estimated that the direct impact of spending at traditional grocery stores is \$3.4 million instead of \$11.2 million from farmers' market spending. As noted above, this is similar to the numbers for Vancouver.¹²

Summary

Farmers' markets in the City of Vancouver provide many social, environmental and economic benefits. Popularity of the markets has never been higher, which has translated to record attendance and vendor revenues. Consumers are willing to support and pay more to local farmers and artisans for their high quality, fresh and value added products. Economic studies demonstrate the impact of farmers' markets. However, for farmers' markets to continue to flourish, official recognition of markets and permissive regulations are required from relevant bodies, which would allow the markets to operate more efficiently and to better supply underserved areas.

9 YLFMS' 2008 annual report shows that market management had expenses of \$285,117. If the same multiplier (2.27) from Figure E is used, and purchases are made within the city, the local impact for Vancouver is estimated to be nearly \$650,000.

10 Direct (first round) spending represents customer purchases; Indirect spending defines subsequent round spending as a result of the farmers' market and farming activities – seed and equipment; Induced spending is the re-spending of wages paid in the direct and indirect category – personal spending by market workers or farmers.

11 'Traditional' grocery store assumes ownership and products procured outside of the local region

12 B.C. Farmers' Markets generated \$125 million to the economy in 2008. Of that, 8% is attributed to Vancouver, which equates to a \$10 million impact. Source: Vancouver Farmers Markets Breakfast Briefing, June 11, 2009.



PHOTO: QUSIC

1.4 Value Added Production

Value added products are the result of further processing to primary processed ingredients. Consumers are increasingly purchasing local value added products because of their health benefits (less commercialized production) and quality. Recognition of quality value added products translates to higher willingness to pay. At the same time, producers and entrepreneurs are enjoying higher economic returns as they create more artisanal type products that respond to consumer demand. Farmers' market expansion over the last few years has helped niche producers gain market access to sell their value added goods directly, instead of through wholesalers and distributors where margins are not as lucrative.

While many niche producers are enjoying success in British Columbia, they are a clear minority. Large internationally based processors dominate the local market, as their low cost inputs and expansive manufacturing scale provide a distinct advantage for their products.^{xxxi} These large processors have moved to areas with lower labour costs that provide better profitability despite the higher transportation costs to bring products to the Vancouver market. Subsequently, Metro Vancouver and Lower Mainland producers are left with relatively few options to introduce processed local goods to the market, especially given high start up capital costs for processors. This cost structure leads to 'boutique' products, which are most frequently purchased by consumers with a high willingness to pay.

Despite existing market challenges, strong consumer demand provides incentives for producers to enter the value added product market. Vista d'Oro Farms, a local producer from Langley, has built a strong value added component to their business. Partnerships with buyers have allowed the farm to re-invest by adding storage facilities and processing features to the farm. A partnership with Vij's restaurant provided Vista d'Oro with sales of its entire tomato crop and Vij's with a quality, local ingredient for the restaurant's menu. This partnership has minimized food waste and has also created a higher economic multiplier from restaurant spending in the

local economy. Further, Vista d'Oro's investments in value added products have created differentiated, high quality preserves that are now sold in Whole Foods Markets.

Summary

Lack of processing facilities in Metro Vancouver hinders the development and introduction of local, value added products to the economy. However, with the correct equipment, resources and entrepreneurial spirit, local producers can take advantage of high consumer willingness to pay and can compete against mainstream producers in the local market. The introduction of a shared production facility or partnerships could leverage further strategic investments for the local economy.

1.5 Demand Drivers: Supermarkets & Restaurants

As the main market buyers for fresh and prepared food, supermarkets and restaurants have significant influence over the origin of their supply. Successful operations are committed to strong partnerships that ensure safe, consistent, high quality supplies of food that benefit the buyer as well as the grower. Not surprisingly, locally owned restaurants and supermarkets more frequently support local producers when compared with their non-local counterparts. For example, Bishop's restaurant actively supports local producers by sourcing local as much as possible. While costs are 'painfully higher' at 3-6%, local product of high quality is a main differentiating factor for the restaurant.^{xxxii} This commitment can create higher brand value, as was realized in a study of Switzerland McDonald's restaurant. Among locals and non-locals, the study revealed that featuring local products is being an effective way to improve brand value.^{xxxiii} Like that of Bishop's, local food costs were higher, but the company witnessed more frequent visits and thus, greater sales revenue.

At the same time, food costs support the driving rationale for restaurants not supporting local; it all comes down to economics in a highly competitive industry with razor thin margins.^{xxxiv} The same can be said for supermarkets and food retailers, unless costs remain low to stay competitive in their peer groups, imported food will continue to be featured. Factors that impact both supermarkets and restaurants are administrative support, supply factors, communication practices, education, buyer inertia and contracts.

Administration & Supply

Many large purchasers have consolidated buying practices for ease of delivery, food safety issues, traceability of product and streamlined bookkeeping. Dealing with many different local producers is time consuming and costly. One large chain supermarket manager stated that for small producers to be considered a supplier, they must be able to meet chain demand from all of its 70-plus stores in British Columbia.^{xxxv}

Communication & Education

Successful relationships between buyers and producers create synergies to enhance local investment through market access and improved capacity. Small producers

face challenges bringing their products to market because of requirements from chain retailers and food service distributors. Distribution companies like Biovia and Discovery Organics are seeking ways to outfit local producers with necessary skills to supply buyers with their specific needs. As a result, retailers and restaurants are including locally differentiated products in their product mixes or menus, as illustrated by the Vista d'Oro farms/Vij's example above.

Buyer Inertia

Few supermarkets and restaurants source significantly from small farmers and local value added producers. Many vendor relationships have been built over time and some restaurants and retailers are reluctant to change procurement patterns. Large wholesalers have the capacity, flexibility and resources to supply buyers with whatever their needs are. Restaurants and retailers remain loyal to suppliers to save time. Unless major policy changes occur from purchasing directors or head chef / restaurant proprietors, supply procurement generally remains 'business as usual'.

Contracts

Food production contracts at the local level, whether CSA in design or not, are an important mechanism to generate and retain wealth in the local economy. At minimum, contracts provide producers with a guaranteed market for their goods and allow buyers to receive guaranteed supply (weather permitting). As stated earlier, CSA and RSA agreements provide buyers and sellers the opportunity to share risk and reward in seasonal crop production. These agreements are starting to take hold, but many buyers cite cash flow challenges (payment must be made in advance) and storage of crops as being two main reasons for lack of uptake – especially from restaurants.^{xxxvi} Further, crop uncertainty and quality issues are barriers for contract adoption.

Summary

Restaurants and supermarkets have the opportunity to effectively 'pull' ingredients through the supply chain. Senior management and owners are central to this shift. Engaging in this practice requires a detailed assessment of the firm's activities and can be used as a part of their selling proposition, in order to efficiently overcome the many barriers that exist to changing 'business as usual' practices.

1.6 Institutional Buying

Public institutions such as schools and hospitals require significant supply to feed students and patients respectively. Large distribution networks supply consistent, processed product sourced from industrial producers in the United States and Mexico. As stated earlier, institutional farms require wholesalers and distributors (who supply institutions) to purchase product throughout the year, which can impact local producers seeking to supply the market in peak season.

Established relationships between institutions and distributors meet cost efficiency needs and ingredient requirements of the system (e.g. washed, peeled carrots). These requirements act as barriers for small-scale producers

with limited resources.^{xxxvii} The publicly funded Vancouver School Board (VSB), which has a food service contract with Neptune Food Services, could request a greater local food component in its supply that would create economic benefits to the local economy. For example, public institutional buyers in other regions have recognized the impact of undertaking favourable local purchasing requirements¹³ that stimulate investment into local capacity.

The Vancouver Convention and Exhibition Centre (VCEC) has made local purchasing a requirement for its operations. The institution purchases local ingredients wherever possible, including 12,000 heads of hothouse butter lettuce, 18,000 bottles of B.C. wine and over a ton of local mushrooms on an annual basis. The VCEC has higher margins than most competitors, which provides room for higher costs sometimes associated with local food.^{xxxviii} Further, relative to the protein portion, vegetable and starch portions impact final costs to a lesser extent.

The Director of Food and Beverage of the VCEC believes that local purchasing is the 'right thing to do' to both celebrate B.C.'s horticultural abundance and ensure long-term sustainability of supply. The VCEC prepares meals through its 'scratch kitchen', which features fresh local food and requires skill to prepare, instead of offering processed dishes that require little preparation. This commitment reduces product packaging and energy costs normally associated with preparing processed food. More importantly, the focus on skill development provides the VCEC with lower employee turnover, which saves the company in training and recruitment costs.

Summary

Institutional purchases could benefit the local economy significantly. Because of the sector's scale, institutions that buy locally could redirect tens of millions of dollars in direct, indirect and induced spending back into the local economy. A movement in this direction would also allow local producers to scale up fresh, local supply that responds to market access and opportunities.

1.7 Summary: Barriers & Gaps Within the Vancouver Food System

This section has identified many barriers and gaps in the current food system in Metro Vancouver. International supply conglomerates control relationships with buyers because of their need for constant demand and British Columbia's geographic inability to provide consistent, year-round supply. Seasonal growing conditions underpinned by static demand and family farm origins, provide disincentives for producers to align and reach a critical growing mass. This fragmented

system keeps costs high. Seasonal land utilization also hinders the ability to attract capital investment to a region where land costs are already high and makes profitable farming difficult. The system also lacks effective collaboration and support facilities to build producer knowledge, growing capacity and differentiated products.

From buyer and seller perspectives further along the value chain, market and regulations limit the ability for local goods to reach consumers on a large scale. With the exception of a few, buyers of all types (retail, restaurant, institutional) lack enthusiasm to support local producers. Thus, gaps in support activities (processing, storage, education) along with sales opportunities (underserved areas, food service flexibility) persist in Metro Vancouver. This structure continues to support the mainstream system where investment returns to international company headquarters, instead of remaining in the local economy.

2. CASE STUDIES

In order to look at how barriers have been overcome in this and other jurisdictions, case studies of the Granville Island Public Market and Portland, Oregon have been undertaken.

2.1 Case Study: Granville Island Public Market

The Granville Island Public Market provides locals with a prime location for food and entertainment and is celebrated as one of the major tourist draws for B.C. The market is visited over 12 million times annually, which is estimated to be 70% local and 30% tourist traffic. Granville Island serves as a useful benchmark because of its strong retail composition, operational structure and sound relationships with value added purveyors.

Granville Island management supports the local food movement and further diversifies its product mix by providing use of day tables one day a week to local producers and value added purveyors. Overall, retailers within the market respond positively to day table competitors because of the increased interest and traffic they provide.

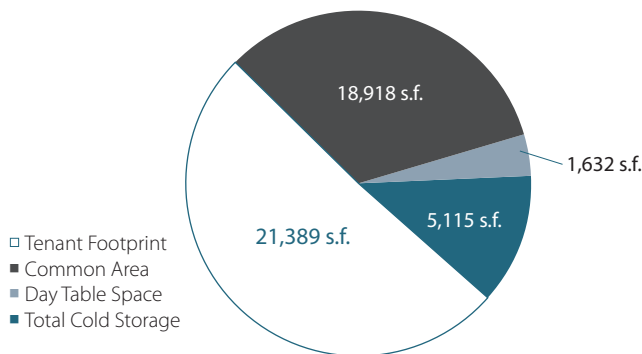
Cold Storage Study

For many food retailers, cold storage is necessary infrastructure. Therefore, it is useful to understand how much cold storage is required for certain business' operations. Granville Island Public Market tenants pay for cold storage as a blended cost with their rent and some tenants pay for additional storage on an as-needed basis. Appendix 1 illustrates cold storage square feet and is detailed per tenant and category, which consists of tenant display space, supporting cold storage (refrigerators and freezers) and communal cold storage spaces. Overall, cold storage represents 12.2% of the public market footprint, out of a total 41,339 Square Feet (sq. ft.). The full breakdown can be found in Figure G.

Granville Island management separates its tenants into nine categories: Bakeries, Butchers and Poultry, Seafood, Produce,

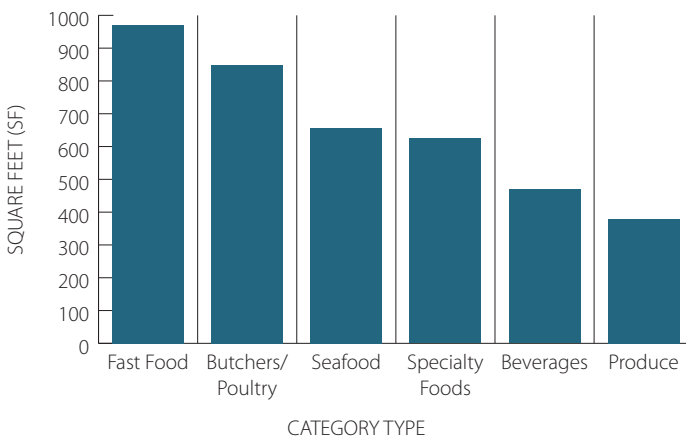
13 Food to Campus project in Conway, Arkansas (1987) saw a redistribution of \$200,000 back into the local economy, citing food procurement changes: President's Council on Sustainable Development (PCSD) (1997) Sustainable Communities Task Force Report, Available on-line: <http://clinton2.nara.gov/PCSD/Publications/suscomm/suscoc-am.html>
C/o Vancouver Food System Assessment (2005) Barbolet et al.

Figure G: Granville Island Public Market Statistics
(Total 41,339 square feet)



Specialty Foods, Beverages, Take Home/Fast Food, Fast Food only and General. The highest category users of cold storage sq. ft. are fast food (970), butchers and poultry (848), seafood (656), specialty foods (625), beverages (469) and produce (378). However, if recognized on a per tenant basis, produce (75.71 sq. ft. per tenant) would rank higher than beverage (65.05 sq. ft. per tenant). Figure H illustrates the top six categories.

Figure H: Top Six Categories - Cold Storage



Given storage constraints and the highly perishable nature of fresh fruit and vegetables, produce vendors have more frequent deliveries than others. This practice also shifts risk to the supplier and explains why produce businesses at the market need less cold storage.

Furthermore, many produce vendors use ice to cool fresh products, which minimizes the need for refrigerated coolant systems. Overall, Granville Island demonstrates the effectiveness of a well-run and prominent public market, which has become an integral part of the city's "foodie" identity and international profile.

2.2 Case Study: Portland

Recognized as having one of the most supportive and robust local food movements, Portland, Oregon is a region that illustrates a strong commitment for local food. Origins of this go back at least 25 years, when municipal, county and state

governments moved to establish an urban growth boundary, similar to the ALR found in the Lower Mainland. The boundary constrained urban growth to specific areas and left a legacy of local agriculture protection policy for the region's fertile land. Over time, the region has maintained its focus on sustainable food and development practices, a movement that has shaped the way value chain stakeholders do business. Further, consumers demand food to be locally sourced whenever possible and overwhelmingly support entities that lead the movement.

Distribution

Portland's distribution network is characterized as being robust and highly efficient. Easy access to the north/south and east/west interstate freeway system allows distributors and wholesalers to efficiently transport goods for the domestic and international markets.^{xxxix} The region is also a centre for major railroad systems. While the system supports large, corporate entities, entrepreneurial partnerships between small-scale producers, value chain partners and public sector groups influence the local economy. Main factors contributing to successful distribution networks in Portland are partnerships, industry prevalence and value chain connections.

Business Leadership & Partnerships

New Seasons Market (NSM) has partnered with an organic producer cooperative, Organically Grown Company (OGC), to create a distribution system that benefits both organizations. The produce buyer for NSM contracts their time with OGC to guarantee supply for the retail stores and demand for the cooperative. This has allowed farmers to scale up their production and create commercially viable crops for retail and direct sales. Consolidated transportation within this partnership also reduces costs and increases technology utilization. OGC leads the industry with a commitment for business sustainability. One hundred percent of the power in both our Eugene and Clackamas facilities is wind generated and B20 grade bio-diesel fuel is used to power their distribution trucks.^{xl} For both initiatives, the company incurs an extra \$70,000 in costs, but believes it benefits their value of their brand.^{xli}

Food Processing Industry

First organized in 1914 and headquartered in Portland, the Northwest Food Processors Association (NWFPA) has more than 450 member companies including 86 food processors with nearly 200 production facilities throughout the Northwest region.^{xlii} Major active food processors in the Portland area are Ajinomoto, Heinz and The Tazo Tea Company. Leadership from the NWFPA and its members help sustain the local food economy.

In addition to large-scale food processors, the Food Innovation Center (FIC) provides educational programs and business development education for entrepreneurs.¹⁴ Its mission

14 FIC partners with Department of Food Science and Technology (FST), Small Business Development Center (SBDC), Portland Development Commission (PDC) and the Oregon Micro-enterprise Network (OMEN). <http://fic.oregonstate.edu/>

is to bring products to market and to advance Northwest food. FIC organizes “Getting your recipe to market”, which is a competitive program for budding entrepreneurs to test recipes, create product business plans to achieve market access. NSM has supported the program for five years and offers guaranteed shelf allocation for successful winners. The Center is situated at Oregon State University and also partners with the Oregon Department of Agriculture.

Value Chain Connection

Collaboration is essential for creating relationships between producers and buyers. Ecotrust¹⁵ is introducing FoodHub (summer 2009), to better facilitate local business transactions through an improved buyer and seller connection through the Internet. FoodHub will allow users to search by product, area, insurance protection, delivery time, certifications and value added activities such as grading and processing. The program draws inspiration from institutional buyers looking for local food or ingredients.

Farmers’ Markets

Portland Farmers Market (PFM) is central to enhancing social, environmental and economic benefits for the city and surrounding community from providing fresh, local food. Markets are gaining in popularity, with 2007 sales totaling \$11.2 million from 14 locations.^{xliii} In addition to its entrepreneurial spirit, PFM benefit from frequent operations, academic and government support as well as private sector linkages.

Frequent Operations and Multiple Locations

- › Fourteen markets populate Metro Portland, with the largest being Portland State University’s Saturday market; \$4.3 million in sales (2007) from 100 vendors
- › PFM operates markets five days a week and reaches most of Metro Portland

Academic Support

- › Oregon State University works with market management by providing research into economic and social benefits for current markets and for future growth opportunities
- › The Oregon Farmers Market Association (OFMA) provides extensive information to strengthen current operations and future expansion activity

Local Government Support

Portland’s Bureau of Planning and Sustainability works directly with the region’s Food Policy Council - a dedicated senior manager represents the city’s interests^{xliv}

The bureau supports economic analyses of the markets and publishes results to the bureau’s website

Private Sector Linkages

- › PFM is assertive in its sponsorship strategy – businesses and non-profits partner with the markets to provide financial and/or operational support



PHOTO: HUHN

- › Private sponsors connect PFM with government through technology to exchange food stamps for market currency, directly on site

Demand Drivers: Supermarkets and Restaurants

Portland area supermarkets and restaurants enthusiastically support local food. Many retailers and restaurants position local food as ‘heroes’ in their selling propositions, partly because of plentiful access to local, seasonal products and partly in response to demanding consumers. Food purveyors of any kind run the risk of failure if they choose to minimize the use of local ingredients. New Seasons Market, HOTLIPS Pizza and Burgerville are three organizations that position local food as heroes within their operations.

Supermarket Influence

New Seasons Market strongly believes in building mutually beneficial partnerships by aligning farmers. ‘Market Day’ is a promotion that runs from June to October and features locally grown produce once a week, outside all nine-supermarket locations.^{xlv} Anchor products like strawberries are used to draw customers to the event, which also features niche products like green garlic that is not normally sold in stores. These niche products previously might not have gained access to market because of space constraints, lack of demand or product awareness. Products in high demand may enter the mainstream supply chain through NSM’s partnership with OGC, which allows the farm and NSM to benefit. A similar promotion, ‘Farm Plate Special’, features seasonal, local produce in the deli department. NSM also aligns itself with many strategic partners, such as the Portland Farmers’ Markets.

Restaurant Influence

Like NSM, HOTLIPS pizza supports local producers by placing them at the centre of their promotional campaign. In-store or online, the company treats suppliers of its ingredients as heroes by providing photos and recognition of their sustainable growing practices.^{xlvi} Restaurant ownership has actively engaged local farmers regardless of cost, with

¹⁵ Ecotrust’s mission is to inspire fresh thinking that creates economic opportunity, social equity and environmental sustainability. The organization is heavily involved with resource industries such as agriculture, fisheries, and forestry. <http://www.ecotrust.org/foodhub/>

sustainability and a seasonal menu core business practices. The company is also assessing ways to preserve local tomatoes to use throughout the winter to be less reliant on California for its supply.

Since 1961, Burgerville follows a proud tradition of utilizing local ingredients. Like NSM and HOTLIPS, Burgerville makes support of local producers a core business practice and part of the company's unique selling proposition. In addition, electricity is 100% wind sourced, canola oil is recycled into biodiesel and healthcare is subsidized for employees. Strong support and investments in these programs promotes the business case; in 2006 and 2007, the company enjoyed double digit, same stores sales increases.^{xlvii}

Institutional Buying

The institutional buying movement is beginning to share the same passion as Portland's food retail and restaurant sectors. As expressed earlier, Ecotrust will introduce FoodHub this summer as a response to increased local demand from all buyers, which includes the institutional segment. Connecting small and medium size farms with these buyers is the key to recreating a strong local food economy. In the fall of 2009, Oregon state politicians will discuss the legislation of local food requirements in Oregon schools and hospitals. However, through the involvement of health, state and private organizations, some institutional support already exists.

Kaiser Permanente Study^{xlviii}

Kaiser Permanente (KP) provided Ecotrust with a grant to test intended results of a proposed bill¹⁶, which would provide institutional purchasers an incentive to procure locally. The grant provided funds on a per meal basis to purchase more Oregon grown, processed and manufactured foods. Results of the study are as follows:

- KP grant dollars encouraged a 72% increased investment in local foods
- For every dollar spent locally by the two school districts, an additional 87 cents was spent in Oregon, generating a 1.87 multiplier
- Investments spurred successive spending in almost every other sector of the Oregon economy^{xlix}

As shown in Figure I, an initial investment of \$66,000 inspired further investments of over \$225,000 and created a return on investment of 241%.

Figure I: Investment in Local Food

Two School Districts, 91 Schools

Lunches per Day	22,000
School Days	43
Total Meals	946,000
Total Investment (\$0.07 per meal)	\$66,220
Inspired Investments	\$225,869
Return on Investment	241%

¹⁶ House Bill 2800 allocates up to 15¢ per lunch and 7¢ per breakfast served to incorporate Oregon agricultural products into school meals. To qualify for this state investment, schools must purchase an equal amount of Oregon products using federal school meal funds. Source: <http://www.ecotrust.org/farmtoschool/>

As an example, the school districts were paying \$0.30 per serving of chili that a national distributor provided. Because of the grant, the school districts could spend \$0.34 per serving of chili and redirected investment to the local processor.¹ The extra four cents per serving, which is part of the overall seven cent lunch meal allocation, contributed to local substitution that might not have been realized without the KP grant. The roughly 13% increase in costs more than tripled the benefit to the local economy.

Oregon State Farm to School Programs

Approximately twelve school districts in Oregon utilize farmers' markets for their fresh produce needs. The Oregon Department of Agriculture and the Oregon Department of Education are promoting local food to school districts. Farmers are willing to meet or beat wholesale prices schools currently pay to their FSD's.¹⁰ Children can learn the value of local foods by meeting, for instance, the farmer that supplied the strawberries in their desserts.

Ecotrust promotes 'Harvest of the Month' where Portland public schools feature one or two locally harvested fruits or vegetables each month. The 'Local Lunch' program features an entirely local set of ingredients, except for condiments. Both programs positively impact the local economy and provide opportunities to educate children about local food in Oregon.

Case Study Conclusions

It is clear from these two case studies that the potential for a vibrant local food system exists in Vancouver. Infrastructure such as Granville Island can create a vibrant and internationally acclaimed public market. Portland's producer relationships and consumer and institutional demand create a virtuous cycle that reinforces the quality, affordability and availability of local food in restaurants, supermarkets, and institutions.

3. CURRENT VANCOUVER INITIATIVES

A number of initiatives are underway in Vancouver that point to the emergence of much of the critical infrastructure (hard and soft) that underpins the success of the case studies above.

3.1 Local Food First¹⁷

Local Food First is a consortium of local food advocates that is seeking to create a sustainable food system within Vancouver by making connections with stakeholders in the value chain. The group works with government and private organizations to understand incentives within the system's current design and to provide education. Local Food First is comprised of:

- Biovia Organic Link,^{lii} which is an organic food service distributor that serves Metro Vancouver restaurants through its 40 member connection of farms and artisans,

¹⁷ Local Food First is comprised of local food advocacy groups including Vancouver Farmers' Markets, the Green Table Network and Farm Folk City Folk. More info: <http://www.getlocalbc.org/en/>

- › Emdoubleyou Design,^{lviii} which is a small design and communications firm that sits on the Local Food First steering committee,
- › Farm Folk City Folk,^{liv} which works with farm & city to cultivate a local, sustainable food system,
- › Get Local,^{lv} which promotes the benefits of eating local to increase local supply and demand of local food in Metro Vancouver,
- › The Green Table Network,^{lvi} which advises restaurants on sustainable and local sourcing practices, and provides linkages to local producers,
- › SFU's Centre for Sustainable Development,^{lvii} which aims to integrate economic, social and environmental objectives in community development and
- › Your Local Farmers Market Society,^{lviii} which provides farmers a direct venue to sell fresh, local food that enhances the local economy

3.2 Vancouver Food Policy Council

The Vancouver Food Policy Council (VFPC) is comprised of individuals from all sectors of our local food system, including food production, processing, access, distribution, consumption and waste management.^{lix} The joint citizen government council meets to examine the food system in Vancouver to make policy recommendations for improvement. Some members on the VFPC are also members of Local Food First. Other cities often point to the VFPC as an important asset that institutionalizes the City's commitment to a sustainable local food network. Further underlining this municipal commitment is the availability of municipal grants for some food-related initiatives.

3.3 Hub Concept

In an effort to address gaps and barriers in the current food system, Local Food First is taking leadership for the idea, development and creation of a local food 'Hub'. The Hub is intended to make connections and build links with small producers, processors and distributors as they attempt to gain market access and build local capacity. Ideally, the facility would create a more robust local food movement and would act as the 'food precinct'¹⁸ headquarters for Vancouver. Potential target neighbourhoods for the Hub are an eastern area of Downtown and within Strathcona.

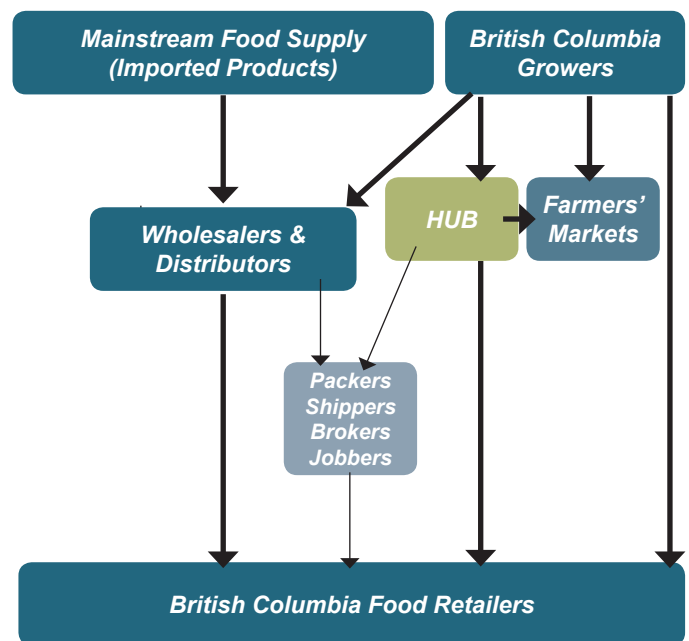
The hub would allow small producers to:

- › Sell direct at a permanent, year round farmers' market
- › Sell to wholesalers, distributors and retailers
- › Store goods in dedicated cold and dry storage facilities
- › Efficiently prepare goods for sale through packaging and grading technology
- › Facilitate the movement of goods through additional distribution options
- › Access processing equipment for 2nd grade fruit and vegetable inventories

- › Reduce waste of good quality food
- › Create value added products with available processing equipment
- › Showcase their quality ingredients as fresh or ingredient products
- › Exchange ideas with other producers and value chain partners
- › Speak with consumers and understand specific needs
- › Test recipes in an incubator kitchen
- › Meet food safety standards for further sales opportunities

Figure J illustrates the food system in British Columbia, complete with the new Hub facility. Supporting actor categories have been simplified and the role of farmers' markets is displayed. Outside of producers, food system actors will be able to better distribute, store and purchase local goods. Finally, consumers would benefit by enjoying a broader selection of locally produced goods.

Figure J: Producer to Retailer/Restaurant with Hub



Adapted from: Novacorp Consulting Inc. 2006. Guidelines for BC Food Producers & Processors on Selling to Food Service Distributors. Report Prepared for the BC Ministry of Agriculture and Lands.

http://www.al.gov.bc.ca/foodprocessing/documents/foodservice_market/final_fsd_marketing_sales_manual.pdf

The Hub and Vancouver Farmers' Markets

In principle, VFM's winter market is envisioned as the anchor tenant of the Hub (see New City Market text box). Because of its permanent structure, it would extend the market's selling season for the mutual benefit of producers and local food buyers. As well, the Hub would eliminate restrictions (signage, permanency) that the farmers' markets face, which would free up time for the Executive Director to build partnerships within the community. Most importantly, the

¹⁸ Food Precinct is a concept being developed by Local Food First that seeks to enhance food security through interactive community engagement. It is supported by community gardens and educational support of horticultural growing practices.

Hub would create a year-round, direct marketing opportunity for producers, which would allow them to scale up capacity through sustained revenue and demand. Excess supply could be stored for future sales and partnerships; farmers could begin to sell wholesale supply to local schools and other institutional purchasers.

New City Market: From Past to Future

The Local Food First alliance is aiming to create a permanent building that includes a Farmers' Market, wholesaling, a retail café, and a number of community-building functions.

While researching the history of farmers' markets in Vancouver, it was discovered that this "New City Market" would not, in fact, be the city's first. The original New



Photo: Creative Commons



Photo: Your Local Farmers' Market Society

City Market opened in 1908, and contained many of the same features proposed for the future facility. The Local Food First proposal is gaining increasing support among stakeholders

in the community, and a fundraising campaign is being launched to raise capital for the project. As the campaign proceeds, information will be available through: **www.eatlocal.org**

The Hub would also place VFM at the centre of a knowledge network, which would increase the society's legitimacy as a leader in local food security issues. Economic benefits to the society and city can be realized through educating stakeholders within the value chain. This knowledge also places VFM at the nexus of food distribution as distributors / wholesalers of all sizes are seeking local supply for their customers. Connecting with these food system partners would allow for companies to scale up in the category of local food and could foster another niche stream of consulting revenue.

Farmers' Market: Strategic Expansion Plans

Vancouver Farmers Markets (VFM) is planning to build on its success over the last few years by growing its five-market network to 11 by the year 2011.¹⁹ Present markets are

concentrated geographically, but as expressed earlier, VFM is seeking to better serve Vancouver communities to benefit farmers, communities and consumers alike. In a process that can undergo 18 months, creating a market requires large investments of time, capital and stakeholder coordination. While VFM has no template for developing a market, the following steps guide potential market locations.

1. Community Interest: VFM needs to understand the level of commitment a community is willing to invest for a market. (Quality) E.g. advertising, local business sponsorships
2. Community Statistics: Demographics, socio-economics, traffic counts, quality of and access to adjacent business
3. Communication with City: After the preceding issues are resolved and considered favorable, VFM begins to exchange ideas with the city

Appendix 2 illustrates the current Vancouver farmers' market network and outlines potential locations for the future. The network can be accessed at:

<http://maps.google.com/maps/ms?ie=UTF&msa=0&msid=105612611428736834941.00046cf8312b2fd1d46e5>

¹⁹ Gastown will be the 5th market to operate – commencing in late summer of 2009 and joins the West End, Kitsilano, Tout Lake, Wise Hall's Winter Market and

Main Street Station in the existing network.

4. CONCLUSIONS

The food system within Metro Vancouver meets consumer demand through a dedicated balance of imported and domestic supply. British Columbia's Agricultural Land Reserve (ALR) ensures land is protected for food production, which is efficiently utilized. However, production capacity is limited because of seasonal growing constraints and a system that restricts domestic supply in favour of imports. Thus, local producers take advantage of a valuable export market, which leaves approximately 20% of locally consumed vegetables coming from local sources. With the population in Metro Vancouver expected to rise 50% by 2040, demand for food is expected to trend at the same rate.

Food processing activities in Metro Vancouver has shifted to other nations because of comparative advantages in scale and input costs, which has left a limited market for secondary grade processing of crops. This shift in power and influence has led to a more consolidated mainstream design, where distribution and processing activities have become less flexible and segmented. In turn, small local producers are faced with significant barriers to enter, especially when monetary disincentives to support local promote a 'business as usual' response from buyers. Other factors that support the system's rigid design are a well-established parallel ethnic production network, high land costs and limited technological investments to extend the growing season and product shelf life.

Despite many barriers found within the local food system, small producers have been able to expand with the advent of more direct sales opportunities through farmers' markets and community supported agriculture (CSA) channels. Vancouver Farmers' Markets are enjoying record sales growth from strong consumer demand even though operations are constrained by restrictions on advertising and market permanency. This unstable operative structure places relationships between farmers and other value chain members are at risk, which may affect long-term success. To reestablish an effective food system, linkages that support producers to successfully enter the sophisticated market are required. A change of procurement policies from restaurant, supermarket and institutional buyers could build greater local capacity, which would have a positive effect on the local economy.

Other municipalities, such as Portland, Oregon, are recognized for its local food movement that financially impacts the local economy. Progressive urban growth legislation that restricts residential growth (similar to the ALR) and a fertile land inventory has provided a skeleton for local food producers to supply consumer demand. Entrepreneurial producers have built upon this structure to create collaborative partnerships that serve as a nexus of local supply, which influences food policy for the region. At the other end of the food spectrum, consumers demand local food from restaurants, supermarkets and institutional buyers, which places pressure on distribution and food

processing networks. Government and private funders also provide incentives for local procurement, which has redirected investment from imported regions back into the local economy.

Vancouver's Granville Island, as visited by over 12 million visitors annually, showcases local food and celebrates the region's local bounty. Management of the market maintains a supportive policy of local producers to assist with building grower capacity as well as increasing interest of the Public Market itself. One of many factors that make the market successful is its cold storage infrastructure. The technology provides tenants with the necessary resources to serve fresh, safe food, which underscores the strong reputation of the Granville Island Public Market and more broadly - the City of Vancouver.

Despite weaknesses within the Metro Vancouver food system, the region is witnessing increased evidence of what makes Portland so robust. More local producers are being supported by the distribution network, which is helping to create an enhanced specialty crop and value added product segment. Supermarkets and restaurants are requesting more local supply from distributors and wholesale companies as a response to consumer demand. Collections of local food advocates, like Local Food First and the Vancouver Food Policy Council, are making recommendations for infrastructure and policy improvements based upon exploratory and secondary market research. Finally, while success of the Vancouver Farmers' Markets is creating increased demand for local food, the proposed central hub facility would play a significant role in linking the producing community with value chain members in Metro Vancouver.

Recommendations

Many different parties will need to cooperate to achieve a more profitable and sustainable local food system that makes better use of existing production by ensuring more of it reaches local shelves. Public institutions can assist producers and farmers' markets by easing regulatory barriers and starting procurement initiatives. The private sector will determine success, and it remains to be seen whether Vancouver farmers, restaurants, retailers and others can build the linkages and partnerships that have been critical to success in regions such as Portland. The Local Food First network has begun the work of filling gaps and building linkages, but will need widespread support across the value chain to build a strong local food system.

Distribution

Stronger distribution linkages are the key requirement in getting local food to market. This can be achieved if the private sector (building on the work of Local Food First) can open up existing or create new distribution channels.

- ▶ Provide access for local farmers to intermediaries and distributors
- ▶ Create storage facilities to store crops and extend the selling season
- ▶ Utilize web resources to connect buyers and sellers real time

- › Assist local producers with investments in technology that lengthen product shelf life
- › Create database that maps all value chain members and their respective needs

Farmers' Markets (FM)

Fewer restrictions and market permanence are central to fostering growth for farmers' markets in Vancouver. The City of Vancouver and YLFMS need to increasingly partner and cooperate to make the markets part of a livable, sustainable city.

- › Reduce restrictive regulations that constrain farmers' market (FM) operations (signage, access to electricity) and create permissive bylaws based on specific FM needs
- › Provide longer-term leases to establish markets and avoid high switching costs
- › Expand network to downtown location during the work week
- › Investigate more commercial locations for the markets, to maximize synergies with neighborhood-level retailers and BIAs
- › Provide tax breaks to businesses that assist farmers' markets (parking, storage)
- › (Along with Local Food first partners) develop hub concept, including a resilient business plan, strong partnerships, and long-term capital campaign
- › Capitalize on economic benefits of farmers' markets and strategically locate markets to meet the needs of underserved areas in Vancouver
- › Build relationships with retailers/restaurants to jointly promote local supply
- › Create a market sponsorship strategy to strengthen operations
- › Link community organizations with farmers' markets to support health

Restaurants & Food Retailers

Retailers and restaurants can create partnerships local producers by promoting their products within their operations, building on a successful value proposition from other jurisdictions.

- › Partner with farmers to create joint promotions that feature local products
- › Build partnerships with farmers to build local capacity through improved Restaurant-Sponsored Agriculture (RSA) adoption
- › Create an alternative RSA / CSA (Community supported Agriculture) design to share up-front costs and improve cash flow
- › Partner with farmers' markets to build local capacity and make them central to the selling proposition, as is common practice in Portland
- › Feature local producers within the restaurant / retail communications – build local brand

Institutional Buying

Large public institutions can improve their supply of healthy local food through procurement initiatives that build local capacity and build on existing institutional resources such

as warehousing facilities. Vancouver Coastal Health, the Vancouver School Board, the City of Vancouver and the University of British Columbia are candidate institutions.

- › Communicate with distributors and wholesalers to improve local sourcing
- › Specify a certain percentage of supply to come from local producers
- › Connect with other institutional buyers to increase scale and lower individual cost of the two above recommendations
- › Link institutional purchase managers with alternative suppliers such as farmers' markets
- › Introduce local food requirements for public institutions and encourage private institutions to change procurement policies
- › Increasingly coordinate schools with local farms to educate children and supply farmers with access to direct sales

Food Processing

Linkages between producers and processors are critical to rebuilding the area's processing infrastructure, building on work underway through the Local Food First network.

Better utilize existing processing infrastructure (i.e., kitchens) to reduce waste and retain local investment

Connect with producers and encourage contract crop production for processing that can be used with 2nd grade products

Provide incentives for primary and value added entrepreneurs through grants

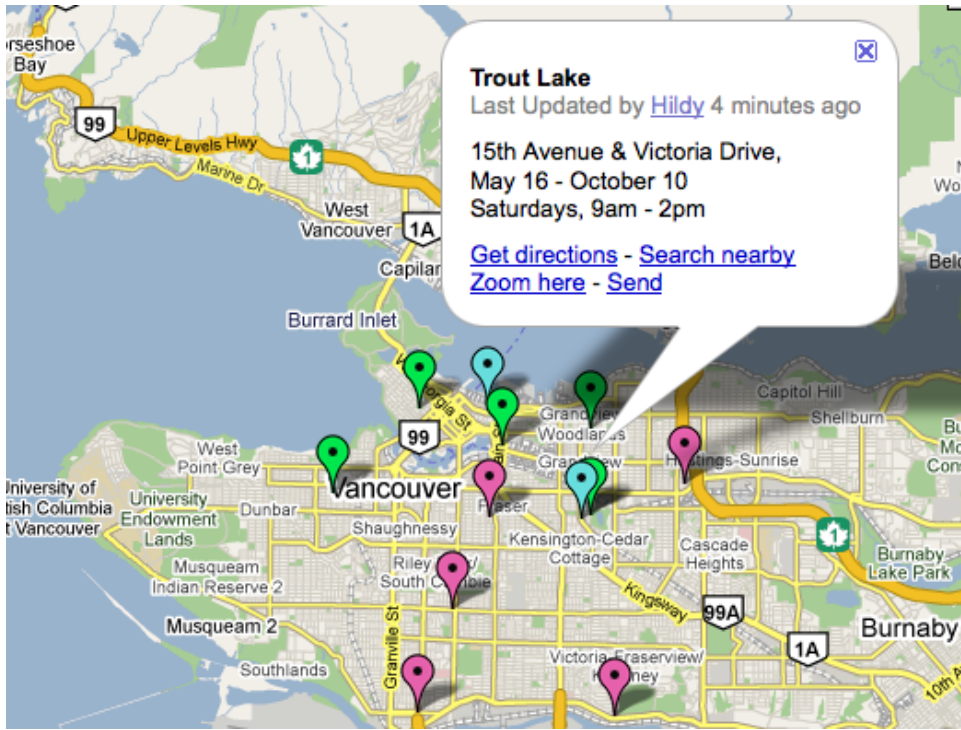
Producers

Farmers will need to better educate themselves about local sales and partnership opportunities in order to access the higher-value local market.

- › Provide financial and educational support for local farms to build capacity and enter the mainstream supply chain
- › Ensure knowledge exists across the industry on processing, packaging, grading, traceability, health and safety, and other requirements of large-scale production
- › Connect with local food processors to utilize 2nd grade field crops
- › Create incentives for distributors and wholesalers to serve the local, independent market, and support a dedicated agent to manage local growers
- › Create farm partnerships to share in packaging and transportation costs

5. APPENDIX 1

Vancouver Farmers' Market Locations



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