



North Okanagan Market Opportunity Study

Exploring Expanded Institutional and Retail Procurement of Local Fruit and Vegetables



Prepared by the Institute for Sustainable Food Systems and the Land to Table Network of the North Okanagan.

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Contents

Executive Summary	5
1) Introduction	6
a) Background and Rationale	6
b) Research questions	7
2) Methodology	8
3) North Okanagan Production and Market Snapshot	10
a) Fruit and Vegetable production in the North Okanagan	10
b) Retail market in the North Okanagan	16
c) Institutional markets in the North and Central Okanagan	17
d) Regulatory landscape for institutional procurement of local food	17
i) Overview of relevant regulations for farmers	17
4) Results:	19
a) Farmer Interviews	19
i) General Data	19
ii) Product Availability	20
iii) Pricing:	21
iv) Key Barriers/Challenges	22
v) Regulatory findings	25
vi) Opportunities	26
b) Retail Interviews	27
i) Retail Market Profiles	27
Corporate Chain Retailers	27
Franchise Stores	27
Independent Grocery Stores	27
Small Independent Retailers	28
ii) Retail Insights	28
General Observations	28
Barriers:	30
Opportunities:	32
Institutional Interviews	34

i) Institutional Profiles	34
Interior Health	34
Okanagan College	35
UBC-Okanagan Campus (UBCO)	35
ii) Institutional Market Insights	36
Opportunities:	36
Barriers:	37
iii) Community Service Organizations – Market Opportunity	37
5) Discussion:	39
Opportunity for Local Aggregation	39
i) Farmer Views:	39
ii) Retailer views:	40
b) Other Opportunities	41
6) Recommendations	43
7) Conclusion	45
8) Appendices	47
Appendix A) Farmer Interview Questionnaire	47
Appendix B) Retailer Questionnaire	51
Appendix C) Institution Questions	54
Appendix D) Regulatory Overview	56

List of Figures

Figure 1: Number of North Okanagan Farms by type (Source: Statistics Canada)	11
Figure 2: Number of farms reporting fruits or vegetables by farm size, in the North Okanagan Region	13
Figure 3: Acres producing fruits or vegetables, by farm size	13
Figure 4: Key barriers mentioned in interviews	23
Figure 5: Opportunities mentioned by farmers, by number of interviews	26

List of Tables

Table 1: Farm size by type	12
Table 2: Number of Farms producing Fruits in the RDNO- by commodity	14
Table 3: Number of farms reporting vegetables in the RDNO	15
Table 4: Number of Retail Outlets by Regional District, by type	16
Table 5: Size of interviewed farm businesses, in acres, by farm type	19
Table 6: Number of interviewed farms selling wholesale and direct market	19
Table 7: Number of interviewed farms selling to various channels, by farm type	20
Table 8: Highest volume crops currently produced by interviewed producers	20
Table 9: Production weights for top crops	21
Table 10: 2022 Average, Maximum and Minimum prices for top crops from farmer interviews	22
Table 11: Top crops procured in 2022 by interviewed retailers (by number of mentions)	32

Executive Summary

Producers in the North Okanagan region have expressed concern that direct market sales channels are saturated. At the same time, successful local institutional procurement pilot projects indicate that there is potential for local, small-medium sized producers in wholesale/institutional/retail sales channels.

Background research indicates that most land in the North Okanagan region goes to the production of livestock or livestock feed, with fruit and vegetable farms making up only 18% of farms. Interviews with 15 of these producers, 10 retailers and 3 institutions revealed barriers and opportunities to scaling up local wholesale procurement of fruits and vegetables (e.g. raw/whole, unprocessed produce).

First, food safety certification requirements (such as Canada GAP certification) of larger retail chains, institutions, and their supply chain partners are a significant barrier to growers looking to scale up their wholesale sales. This is due to cost, administrative burden, and concern over degree of benefit. Other challenges to scaling up include managing logistics around ordering, packing, labour, infrastructure, and delivery strategies, as well as slim price margins. Generational communication divides and high turnover in retail produce managers can also hamper relationship building and resultant sales, as can misconceptions about the quality of local product and consistent delivery/supply.

However, opportunities likely exist with institutions and retail outlets that may have less stringent food safety standards, such as independent grocery stores, public education institutions, or private institutions. While institutions vary greatly in their systems, requirements and ability to use raw/whole fruit and vegetable items, it is likely that as post-secondary institutions continue to grow in the Okanagan (e.g. housing and hosting more students), so will opportunities to expand these sales channels over the longer term. Growers indicated that they would be willing and able to scale up if a ready wholesale market existed. Crops with the most opportunity include storage crops which, with the development of adequate storage infrastructure, have potential to be bought and sold year-round across the Okanagan region.

Recommended actions include a more thorough examination of Canada GAP requirements including alternatives as well as training programs and assistance with certification for small-medium sized growers. A pilot program with corporate grocery chains could better understand and develop this high-potential but currently difficult market sector. Opportunities also exist within institutions (including those that require GAP certification) to trial local supply of niche products into their retail spaces (e.g. cafeterias). Ultimately, the independent grocery stores represent the greatest market potential in the short to medium term for expansion of fruit and vegetable sales from local growers.

Further to this finding, support could be lent to the development of storage infrastructure and small-scale aggregation businesses which could address some of the aforementioned barriers. Organizations like the Land to Table Network (Land to Table or L2T) could help pair up interested farmers with potential buyers, drive relationship building and a communications campaign to promote local retailers who support local procurement; giving greater transparency of the extent to which retailers actually support local growers, in order to help develop market demand for local product in retail stores.

1) Introduction

a) Background and Rationale

Small and medium farms remain the most common scale of farming in the North Okanagan and are essential to maintaining the rural character and economy of the region. However, these farms struggle to compete with a global supply chain that makes cheap food easily available to institutions and retailers through corporate suppliers; with local direct sales avenues such as farmers markets and CSA programs being saturated. Conversations facilitated by Land to Table (beginning in 2017), have revealed that local small to medium scale farmers are interested in both direct sales to institutions and retailers, and pursuing aggregation as a strategy for increasing access to new markets (to diversify sales and grow new and existing farming businesses).



Given the impacts to supply chains experienced in 2020 due to the Covid-19 pandemic, and further disruptions in 2021 due to climate extremes that caused major flooding (disrupting trucking routes from the Coast) and left grocery stores shelves bare and institutional kitchens scrambling; institutions and retailers, along with consumers are more aware of where their food is coming from. Ensuring resilience during times of disruption requires closer-to-home supply relationships; and value chain development.

“Relationships between people who grow food and people who eat food are the foundation of a thriving local food system, but corporate global supply chains have actively destroyed these relationships.” - local North Okanagan farmer

Building on the successes and foundation of a 2021-23 collaboration between L2T and the University of British Columbia Okanagan campus (UBCO) to increase local food procurement at that location, Land to Table has partnered with KPU’s Institute for Sustainable Food Systems (ISFS) and a local farmer consultant to undertake this Market Opportunity Study.

This Study was designed to better understand local supply of raw and whole, wholesale volume fruits and vegetables produced in the North Okanagan and in turn, the demand potential within Okanagan based institutions and retailers. The study assesses: existing regional supply; pricing; demand of different regional markets; procurement barriers; and overall operational viability for the expansion of sales of local vegetables and fruit. Further, the study recommends pathways for next steps to further incentivize the development of local small-scale aggregation infrastructure and facilitate direct sales of produce to institutions and retail channels in the Okanagan. An additional intention of the study was that it serves as a template that can be replicated for other agriculture products and commodities in the North Okanagan region and other areas of BC. Furthermore, background research was designed to provide a more accurate snapshot of North Okanagan farms, telling us who is operating in the region, what they are producing and how that configures with our understanding of the region's agriculture, and applied to other areas of work for Land to Table and local government.

This work is a part of a broader initiative to develop a local value chain*, grow the local food economy in the North Okanagan and strengthen food systems in BC, supported by Land to Table, the North Okanagan Regional Government and other local partners, as well as funders, including Feed BC.

*Food value chains represent a business model in which food producers form strategic alliances with other value chain actors, such as processors, aggregators, distributors, food services, and consumers, to enhance financial returns through product differentiation that advances certain values, like "local" or "organic". These values create a 'demand pull' that is the driving force in the local food value chain, rather than the 'supply push' of a typical global food supply chain. This 'demand pull' allows local food to compete against the 'lower cost', 'convenience' of the global food system, in which all the negative social, environmental, economic and health impacts have been externalized or exist elsewhere.

b) Research questions

The study was guided by the following research questions:

1. What is the current state of vegetable and fruit production in the region?
2. What is the current state of the institutional and retail procurement landscape in the region?
3. What is the feasibility of scaling up local vegetable and fruit procurement to institutions and retailers in the Okanagan?
4. What are the current barriers to local procurement in the region?
5. What are the opportunities for market development?
6. What needs to occur to successfully scale up local procurement?
 - a. How can small-scale aggregation help to achieve this?

2) Methodology

a) Background data collection

Background information on the current state of agriculture in the region was compiled from the 2021 Census of Agriculture for the North Okanagan Census Division, as well as the Spallumcheen Agri-Hub Feasibility Study (2002). In addition, custom data on farm area for fruit and vegetable farms in the region was purchased from Statistics Canada.

Information on the regulatory frameworks that apply to fruit and vegetable growers was gathered through desktop research, emails and phone calls with relevant stakeholders.

b) In - Depth Interviews

In-depth interviews were conducted with 15 farmers, 10 retailers, 3 institutions, and 2 community service organizations. Respondents were recruited from two directories compiled for this project - for farmers, existing Land to Table network directories were augmented by team knowledge. Over 47 farmers were first contacted through the Land to Table mailing list, while an additional 20 were contacted via personal email. Farmers were asked about their current sales channels, top crops, volumes and pricing, as well as potential interest in establishing or expanding wholesale sales.

For retail and institutions, a directory was compiled from web research. Twenty two different retailers in the North and Central Okanagan (Kelowna, Vernon, Enderby, Lake Country, and Armstrong) were contacted to participate in the market opportunity study based upon prior knowledge of their local procurement, or because they were believed to have an interest (e.g. independent stores). Produce managers were called at each retail location to participate in an interview in person, over the phone, or via a google form at the participant's convenience. Retailers ranged from small independent stores to large corporate chains. Mega-chain and large grocery chains (e.g. Walmart, Superstore, Costco) were not contacted, on the assumption that their procurement practices would be less flexible and amenable to local farm products. Ten retail businesses and three institutions opted to participate in the study.

Institutions included one health authority (focus on hospitals) and two post-secondary institutions (UBCO and Okanagan College). Further, the third party vendors operating through Okanagan College were also contacted for further discussion about current local food procurement practices and interest, to which only one responded.

Study Limitations

In this study, as in any study of this nature seeking to understand market opportunities within retail, challenges to accessing data have limited our analysis. The following outlines the limitations we experienced:

- Difficulties obtaining interviews, particularly with chain retailers
- Lack of retailer incentive to collect/share data on local food procurement
- Incomplete data (e.g. interviews with 15 of 180 farms growing fruits and/or vegetables; limited responses from retailers)
- Limited ability to compare supply and demand with/between data that was collected due to incomplete nature of data
- Limited applicability to institutions who contract out food services to outside agencies

Retailers and institutions were asked about current procurement practices, attitudes toward local procurement, as well as barriers and opportunities. Institutional interviews were structured differently than retail interviews, and included multiple conversations with the same institution (departments or vendors), designed to explore opportunities for relationship development to increase local food procurement over the longer term. This approach is based on a partnership that Land to Table has developed with UBC-Okanagan over the past 2.5 years to support that campus to increase local food procurement from small scale farmers through local aggregation.

Detailed interview guides can be found in the appendices.

In addition, two local social service organizations provided procurement data to help inform market opportunities (e.g. volumes and/or pricing) for local produce.

3) North Okanagan Production and Market Snapshot

a) Fruit and Vegetable production in the North Okanagan

This market opportunity study focuses on the potential for procurement of local fruit and vegetable crops by institutions and retailers in the North Okanagan region (and by proxy, the Regional District of North Okanagan, or RDNO). The Regional District of North Okanagan (RDNO) is the northernmost regional district in the Okanagan bioregion of BC. Agriculture is a defining component of the history, identity, and economy of the North Okanagan.¹

How much agricultural land is in the region?

The RDNO contains 0.6% of BC's total land base, but 2.7% of the provincial agricultural land base. It has 31.5% of this agricultural land in crops (versus natural land or fallow), which exceeds the BC average of 24.4%, highlighting the importance of the region's agriculture. The RDNO has 170,228 Acres of land in the Agricultural Land Reserve (ALR), which amounts to 8.7% of the total land area in the RDNO (1,444,293 ac).² The total farmed area was 154,234 acres in 2021, with 48,596 acres in crops.³ Fruits and vegetables are grown on 3.1% of the cropland base in the RDNO, estimated to be 1,503 acres (1,164 acres for fruit and 340 acres for vegetables).



1 Regional District of North Okanagan, 2015. "Regional Agricultural Plan". <https://www.rdno.ca/sites/default/files/2021-09/Regional%20Agricultural%20Plan.pdf>

2 Township of Spallumcheen, 2022. Spallumcheen Agri-Hub Feasibility Study.

3 Statistics Canada, 2021. Census of Agriculture. <https://www.statcan.gc.ca/en/census-agriculture>. Note that this is a different source than the previous ALR area numbers, so cannot be directly compared (2014 to 2021 data).

How many farms are in the region?

A total of 972 farms were recorded in the North Okanagan Census Division in 2021, a decline from 1,039 reported in 2016.⁴ The most common farm types include livestock production (particularly cattle ranching), and hay farming, accounting for over 75% of the farms in the region. Vegetable and melon farming, fruit and tree nut production, and combination fruit and vegetable farms account for 6.9%, 9.9%, and 1.1% of farms in 2021 respectively, equaling 67, 96, and 11 individual farms.^{5,6} In all, 17.9% of farm operators in the North Okanagan engage in fruit and/or vegetable farming.⁷

North Okanagan Agriculture by Type, based on number of farms

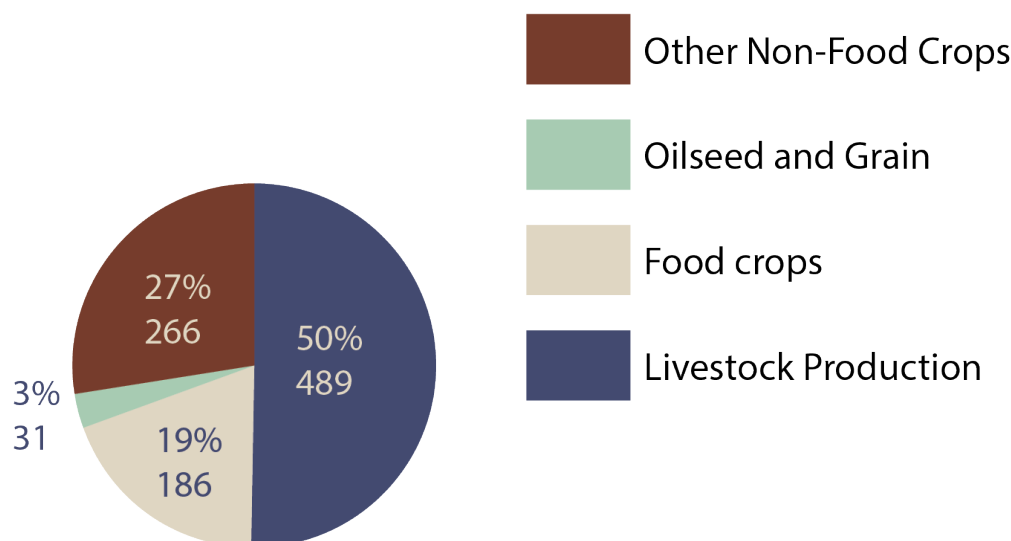


Figure 1: Number of North Okanagan Farms by type (Source: Statistics Canada)

This Agriculture snapshot uses 2021 Census of Agriculture data to illustrate key facts and figures surrounding fruit and vegetable production in the RDNO. Detailed analysis of other sectors (eg. Livestock production) is not the focus of this report, though these sectors are also a major component of the region's agriculture.

What size are farms in the RDNO?

Of the 972 farms in the RDNO, 693 (71%) are under 70 acres, with 292 (42%) of these under 10 acres. As such, it is evident that the majority of farms in the region are small or medium-scale farms.

4 Statistics Canada, 2021. Census of Agriculture. <https://www.statcan.gc.ca/en/census-agriculture>.

5 Statistics Canada. Table 32-10-0315-01 Fruits, Census of Agriculture, 2021a

6 Statistics Canada. Table 32-10-0355-01 Field vegetables, Census of Agriculture, 2021b

7 Township of Spallumcheen, 2022. Spallumcheen Agri-Hub Feasibility Study.

Table 1: Farm size by type

	Oilseed and Grain Farming	Food crops (except oilseed and grain farming)	Livestock production	Other non-food crops (including animal forage)	Total, all farms
Under 5- acres	1	58	46	15	120
5- to 9.99 acres	0	42	86	44	172
10- to 29.99 acres	4	49	137	66	256
30- to 69.99 acres	8	16	62	59	145
70- acres or more	18	21	158	82	279
Total:	31	186	489	266	972

As Table 1 illustrates, most farms in the region producing food crops tend to be smaller (under 30 acres), whereas the majority of livestock producing farms are larger (over 30 acres, and particularly over 70 acres).

What size are fruit and vegetable farms in the RDNO?

Statistics Canada reports 180 farms reporting that they grow fruits and/or vegetables in the North Okanagan, out of the 186 classified as producing food crops. Of these, 56 were under 5 acres, 42 between 5 and 10 acres, and 48 between 10 and 30 acres. Most fruit and vegetable farms are under 30 acres, and of these, the majority are less than 10 acres, supporting the hypothesis that **fruit and vegetable farms in the North Okanagan region are small to mid-sized enterprises.**



Number of farms classified as producing food crops, reporting production of fruits and/or vegetables, by size

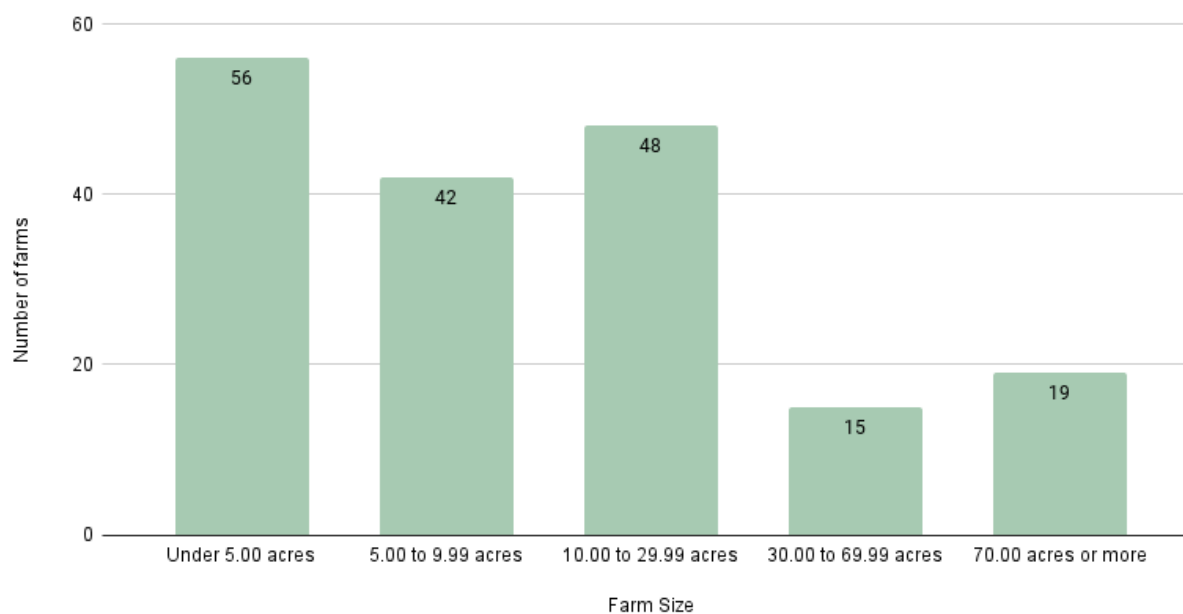


Figure 2: Number of farms reporting fruits or vegetables by farm size, in the North Okanagan Region

In terms of area, fruit production in the region occupies 1,164 acres, with vegetable production a much smaller 331 acres (figure 3).

Total area of fruits, berries and nuts (producing and non-producing) - Acres and Total vegetables - Acres

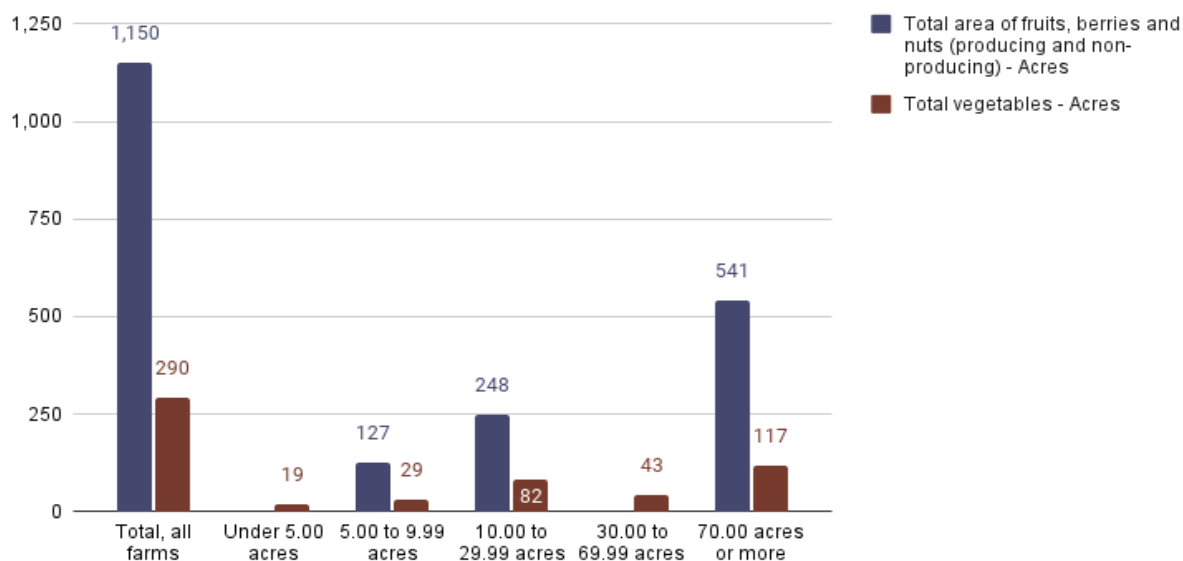


Figure 3: Acres producing fruits or vegetables, by farm size

What are the most commonly produced fruit and vegetable crops?

In terms of fruit production in the region, 172 farms reported growing fruit, with apples the most common commodity, followed by raspberries, sweet cherries, plums and prunes, and pears.⁸ Numbers of farms reporting different fruit commodities are summarized in Table 2.

Table 2: Number of Farms producing Fruits in the RDNO- by commodity

Apples	77
Raspberries	58
Cherries (sweet)	43
Plums and prunes	34
Pears	28
Strawberries	27
Grapes	25
Blueberries total	21
Haskaps	21
Peaches	20
Other fruits berries and nuts	19
Apricots	15
Saskatoons	13
Blackcurrants redcurrants and whitecurrants	12
Cherries (sour)	9

Vegetables saw 127 farms producing product, with the most common field crops including garlic, squash, tomatoes, cucumbers and root crops (carrots, beets, onions).⁹ Numbers of farms reporting different vegetable commodities are summarized in Table 3.



⁸ Statistics Canada. Table 32-10-0315-01 Fruits, Census of Agriculture, 2021a

⁹ Statistics Canada. Table 32-10-0355-01 Field vegetables, Census of Agriculture, 2021b

Table 3: Number of farms reporting vegetables in the RDNO

Garlic	73	Lettuce	16
Squash and zucchini	54	Broccoli	14
Tomatoes	43	Onions green / shallots	13
Cucumbers	39	Kale	13
Carrots	33	Cauliflower	12
Sweet corn	30	Spinach	11
Onions, dry	29	Rhubarb	11
Beets	29	Radishes	10
Green and wax beans	25	Asparagus, producing	8
Other field vegetables	24	Celery	6
Green peas	24	Brussels sprouts	5
Potatoes	20	Asparagus, non-producing	5
Pumpkins	19	Rutabagas and turnips	4
Peppers	19	Cabbage, Chinese	4
Cabbage, regular	18	Mushrooms	2

There were also 29 farms reporting greenhouse production of fruits and vegetables in the region, including tomatoes, cucumbers, peppers, herbs and other products.¹⁰

Unfortunately, data regarding the quantities/supply of each commodity produced is not available from the census.

What about Organic farms?

In 2021, 32 farms in the RDNO stated that they offered certified organic products for sale in the census, while 5 farms offered transitional organic products for sale.¹¹ In BC as a whole, 457 farms offered certified organic products and 57 transitional products.

Data received from Organic BC in 2023 closely corroborates this, with 38 certified organic farms and 4 transitional. Products offered span the range of commodities including forage, livestock, fruits, vegetables, nuts, and flowers. Of these 38 total organic farms, 28 sell fruits and/or vegetables. Farm size ranges from 2 to 1,679 acres, with the majority of farms (14 farms) between 10 and 30 acres.¹²

What can we say about Farmers in the RDNO?

In the RDNO in 2021, there were 1,475 farm operators recorded, with 875 (60%) male and 600 female (40%). The most common age bracket was over 55 years of age, with the average age of farmers in the region being 59.2 years.¹³

10 Statistics Canada. Table 32-10-0360-01 Greenhouse products, Census of Agriculture, 2021d

11 Statistics Canada. Table 32-10-0363-01 Organic products, Census of Agriculture, 2021e

12 Organics BC, 2023. Pers. Comm. With M. Paradis, Operations Manager, Organics BC. Jan. 6, 2023.

13 Statistics Canada. Table 32-10-0381-01 Characteristics of farm operators: Age, sex and number of operators on the farm, Census of Agriculture, 2021f

b) Retail market in the North Okanagan

In the North Okanagan, there exist a range of retail outlets that sell produce. Research into market opportunities extended to the Central Okanagan as these are within an acceptable travel distance of North Okanagan farms. Table 4 outlines these retail outlet types, by Regional District.

Table 4: Number of Retail Outlets by Regional District, by type

	RDNO	RDCO	Total
Mega-Chain* (Walmart, Superstore, Costco)	2	5	7
Chain Grocery Stores	8	12	20
Franchise Chain Stores	2	5	7
Independent Grocery Stores	5	3	8
Small Independent Retailers ("green grocer")	12	6	18

* Mega-Chain stores are corporate multi-national stores. These are included in this table as part of the retail landscape in the region, but have not been included as foci in this study.

For a description of these categories, see Retail Profiles see Results section 4, b, i.

There are also many farm stands and farmers' markets in the region that have not been included, as they offer direct-to-consumer sales that are already well established (and often saturated), and this study focuses on wholesale (e.g. bulk purchasing) opportunities.



c) Institutional markets in the North and Central Okanagan

In addition to the retail market, there are a number of public and private institutions with potential to procure raw/whole fruit and vegetables. Largest among these are institutions under the umbrella of the **Interior Health Authority (IH)**, including hospitals, care homes, and retail food service outlets, such as cafeterias, within these facilities. **Public post-secondary institutions** include UBC-Okanagan and Okanagan College, the latter having 2 campuses in the North and Central Okanagan (as well as one in the Shuswap and one in Penticton). There are also **private seniors care homes** (who did not respond to requests for interview); along with **elementary and secondary schools**. As school food programming is only beginning to be developed in the North Okanagan, schools were not contacted for the purpose of this study. However, based on ongoing work by Land to Table, in light of recent Provincial funding announcements, this sector represents significant potential for local procurement.

Institutions vary greatly in their operations and service delivery model, and therefore the ability to use raw/whole fruit and vegetable ingredients. For example, one post-secondary institution uses third party vendors/operators to provide food services. Typically, institutions contract out catering services to a food services provider, who in turn contract additional parties to purchase and manage distribution of food to the food services kitchens (i.e. Sysco and Gordon Food Services). While contracted distributors try to include local food within their offering (and are purchasing wholesale volumes), they were excluded from this study as their requirements are not typically well aligned with small-medium scale farm operations (in terms of minimum volume, food safety certification requirements and price points).

Generally speaking, profit, efficiency, and affordability are key drivers in decision making, which leads to patronizing vendors/service providers that provide the widest range of products, volume discounts, and lightly processed foods (e.g. chopped carrots) on a 24-hour order-to-delivery cycle.

d) Regulatory landscape for institutional procurement of local food

i) Overview of relevant regulations for farmers

There are very few licenses required for fruit and vegetable farmers who sell only through farmers markets or at a farm stand, and do not process their produce. As scale and scope of marketing increases, so do the regulatory and licensing requirements. For a full list and overview of regulations, see Appendix D.

In general, businesses will require a business license from their local government, and a business registration number from the Canada Revenue Agency if the business makes over \$30,000 a year. As well, local government zoning restricts the kinds of activities that can occur on a parcel of land. If the farm is also located in the Agricultural Land Reserve, then those additional regulations and restrictions apply.

If a farmer is selling any of the specified regulated crops outside of direct sales, the BC Vegetable Marketing Commission (BCVMC) applies and a license should be obtained. The BCVMC focuses on ensuring “orderly marketing” for regulated produce. This includes ensuring minimum pricing, that produce is being sold “where it is supposed to be”, and other general orders, including ensuring traceability of field crops. For a new member, the cost is approximately \$1000 to initiate a license, and then approximately \$250/year to maintain.



BCVMC licensed producers can only sell their produce through a licensed agency (exemption exist for certified organic storage crops, or less than 2000m² of greenhouse crops). If exempt, you must sell directly to a licensed wholesaler (lists available on the BCVMC website), and licensed wholesalers are only allowed to purchase from licensed producers.

Food safety requirements vary depending upon the market. The Safe Food for Canadians Act applies if products will be sold across provincial boundaries. The Interior Health Authority regulates food processing, but this does not apply to the production of whole fruits and vegetables.

Wholesale distribution companies, large grocery chains, and health authorities (i.e. Interior Health) in Canada, have identified Good Agriculture Practices (GAP) as their preferred food safety program. This applies to these retailers/institutions in the North and Central Okanagan as well. Canada GAP applies to fruit and vegetable producers, was developed for large farms with a focus on inter-provincial or export markets, provides a complete framework to develop a food safety plan, facilitates accurate food safety record-keeping, and provides an inspection and certification process that is recognized internationally.

Canada GAP certification can be quite involved and expensive for small farms, costing approximately \$2000 annually. This is discussed at length in later sections of this report.

4) Results:

a) Farmer Interviews

i) General Data

In total, 15 farmer interviews were conducted - responses were received by one orchardist, two berry farmers, and twelve vegetable farmers.

Farm Size: Vegetable farms ranged in size from 800 sq ft indoor growing operations to 125 acres, but the majority were between 0-5 acres, 5-10, or 10-30 acres in size (Table 5). Berry farms were 2.5 and 60 acres in size, and the orchard was 10-12 acres.

Table 5: Size of interviewed farm businesses, in acres, by farm type

Farm Type	0-5 acres	5-10 acres	10-30 acres	>30 acres
Orchard fruit	-	-	1	-
Berries	1	-	-	1
Vegetables	5	2	2	2

Certifications: Of the vegetable farms, the majority (8) were certified organic, one was spray free, one was not producing for the upcoming season, and two had no certifications. The fruit orchard was certified organic, as was one berry producer.

Sales channels: Interviewees were asked about their current sales channels and the approximate breakdown across them. Of the 15 interviewed farmers, one was no longer selling product. Twelve farmers currently sell to wholesale channels while 2 do not. Among those selling wholesale, 6 indicate that they also sell through direct marketing channels (Table 6).

Table 6: Number of interviewed farms selling wholesale and direct market

Marketing Channels	# of farms
Wholesale only	6
Wholesale and direct market	6
Direct Market only	2
Total	14

Table 7 provides details of wholesale and direct market channels by farm type. Wholesale channels include retail stores, restaurants, institutions and broker/distributors. None of the 15 farmers interviewed currently sell to institutions.

Table 7: Number of interviewed farms selling to various channels, by farm type

	Total	Vegetables	Fruit/ Berries
Wholesale	12	9	3
Retail stores	4	3	1
Local Distributor/broker	3	2	1
Institutions	0	1	0
Restaurants	5	4	1
Direct Market	8	6	2
Farmer's Market	5	4	1
CSA	3	2	1
Farm Gate	4	2	2

Of those farms currently selling wholesale, 7 indicated that they would be interested in supplying additional customers, while 5 stated that they would need to expand or make changes in order for this to be possible. Required changes included land or space for expansion and infrastructure needs (eg. wash/pack stations, coolers/storage, additional irrigation, and additional food safety certifications).

ii) Product Availability

Producers were asked for their top three crops currently produced, by volume, as well as the weights, and pricing for these crops. Table 8 summarizes this information.

Table 8: Highest volume crops currently produced by interviewed producers

Crop Name:	Total Mentions:
Potatoes	5
Carrots	5
Beets	4
Lettuce/greens	4
Cabbage	3
Onions	2
Garlic	2
Winter squash	2
Apples	1
Corn	1
Beans	1
Haskaps	1
Microgreens	1
Grains	1
Blueberries	1
Tomatoes	1
Radish	1

While all of the crop volume and type currently produced has an existing market, some producers did mention potential crops for future expansion. However these were generally the same as existing crop types above - with most mentions pertaining to storage crops.

Table 9 summarizes the total amounts of top crops produced by the farmers interviewed in the 2022 growing season.

Table 9: Production weights for top crops

Crops and Categories:	Total Weight (Lbs):
Greens	542,001
Lettuce/greens	529,001
Microgreens	13,000
Berries	506,000
Blueberries	500,000
Haskaps	6,000
Storage Crops	215,408
Potatoes	53,502
Carrots	55,902
Beets	25,501
Onions	30,001
Garlic	2,001
winter squash	9,500
Rutabaga	4,000
Turnips	3,000
Celeraic	3,000
Cabbage	29,001
Grains	28,000
Apples	50,000
Misc. Crops	2,400
Beans	400
Watermelon radish	2,000

As the table indicates, there are over 500,000 lbs of greens being produced, the same for berries, and over 200,000 lbs of various storage crops. Apples are at least 50,000 lbs, with up to 200,000 lbs available in the next few years due to expansion plans.

While smaller producers may not be producing large volumes, those small volume sales are critical to the success of their business and their importance should not be overlooked. These volumes also demonstrate aggregation potential, whereby an aggregator could be employed to bring produce from several farms together to meet larger volume orders, and create efficiencies through packing and delivery.

Like Table 8, Table 9 summarizes the 2022 production. Additional production may also be possible with expansion of market opportunities, as many farmers indicated the ability and interest to expand production if the wholesale market demand existed.

If ever in the future I had more demand for produce than I could supply, then maybe I will look at renting a secondary site.

iii) Pricing:

Table 10 reports the average price per pound from our interviews with farmers. In some cases these averages mix direct market and wholesale pricing, therefore it should not be taken at face value but rather as a general idea. Max and min prices quoted in interviews are also reported in the table to give a sense of the range.

As expected, wholesale prices are discounted based upon volume, in most cases. One producer mentioned that wholesale prices are around 60% of their farmers market prices.

Table 10: 2022 Average, Maximum and Minimum prices for top crops from farmer interviews

Crop Name:	Average Price/lb:	Max Price/lb	Min Price/lb
Microgreens	\$31.00	\$31.00	\$31.00
Garlic	\$11.00	\$11.00	\$11.00
Haskaps	\$10.00	\$15.00	\$8.00
Lettuce/greens	\$7.25	\$11.25	\$2.50
Beans	\$4.00	\$4.00	\$4.00
Tomatoes	\$3.00	\$4.00	\$2.00
Carrots	\$2.91	\$5.50	\$1.35
Blueberries	\$2.00	\$2.00	\$2.00
Watermelon radish	\$1.88	\$1.88	\$1.88
Potatoes	\$1.81	\$3.00	\$1.25
Celeriac	\$1.72	\$1.72	\$1.72
Rutabaga	\$1.60	\$1.60	\$1.60
Beets	\$1.58	\$1.75	\$1.50
Onions	\$1.50	\$1.50	\$1.50
Apples	\$1.50	\$2.50	\$1.45
Turnips	\$1.40	\$1.40	\$1.40
winter squash	\$1.38	\$1.50	\$1.25
Cabbage	\$1.28	\$1.30	\$1.25
Grains	\$0.35	\$0.35	\$0.35

iv) Key Barriers/Challenges

The most frequent barriers to entering or increasing sales to the wholesale market cited were dealing with food safety, in particular Canada GAP certification. However, general administrative burden, packing and washing challenges, pricing, delivery and volume issues were also commonly referenced.

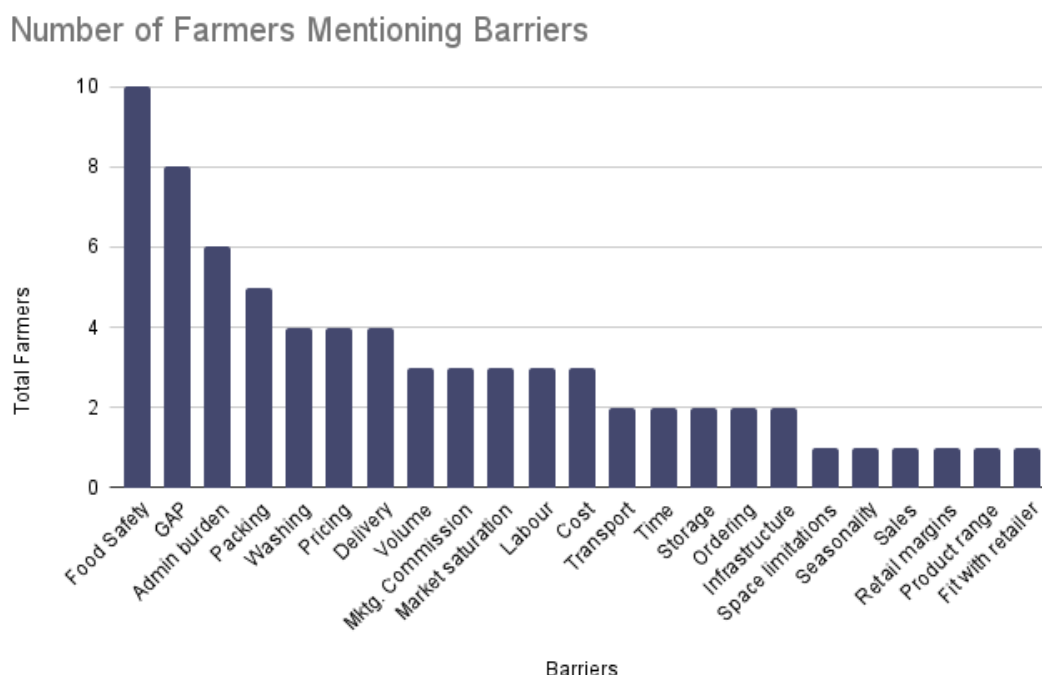


Figure 4: Key barriers mentioned in interviews

Barriers differed slightly depending upon whether farmers were already established in wholesale sales:

1. **Major barriers for farmers that are currently selling into wholesale markets:**
 - a. the cost and administrative burden to get Canada GAP certified,
 - b. additional logistics and time to deliver to new places and manage new relationships,
 - c. access to additional storage (depending on time of year and type of crop).

2. **Major barriers for farmers that are not currently selling into wholesale markets:**
 - a. the infrastructure required to handle, wash, and store larger volumes of crops,
 - b. the cost (certification and infrastructure changes required) and administrative burden to get Canada GAP certified,
 - c. marketing skills focused on direct sales and feels like a new skill to market to wholesale customers
 - d. concern about price point/margins.

Concern is that we have pretty good connections with most of the potential customers in the area, so not sure who else could be out there to sell future volumes. Also, there are increasing organic growers, will it become saturated? Will we all be able to sell at the price point needed?

Producers also cited challenges with scaling up production in terms of post-harvest handling (eg, washing, sorting, packing) for certain crops like carrots, and the challenges in finding skilled labour to do so:

Packing, and then also the cleanup, I think it's a difficult job to fill. Over the years it can be difficult to recruit and retain staff, because sometimes the people who are outside in the fields in the summer, actually they don't want to do that winter packing job because it is too repetitive.

Additional challenges cited by growers who already sell into wholesale markets included challenges receiving payment from smaller scale, independent retailers – this is particularly a barrier when already transitioning from farmers markets with immediate payment to an invoicing system with delayed payments. Sometimes, a few experiences like this made growers unwilling to continue wholesale sales:

He used to sell to some grocery stores in town, but they sometimes wouldn't even pay the bill, so he stopped bothering.

In addition, anecdotally there seems to be a fairly high turnover in retail store produce managers, which makes it difficult to maintain consistent sales as so much depends upon relationships that are developed over time. When those managers change, farmers have to start over.

Most significant however, was that, farmers almost exclusively felt that Canada GAP was not a feasible food safety standard for small scale farmers to meet as it exists currently:

3. There is a resounding sense that Canada GAP is not feasible for small-medium scale farmers:

- a. the cost/burden far outweighs the risk that unprocessed vegetables present in the marketplace
- b. there is not a strong sense that being certified opens big/valuable enough market opportunities.

I don't think I'll ever be able to afford to go through the system like they want me to for the benefit that it would bring me.

Farmers echoed that food safety is important to them, but that Canada GAP is not the right fit.

"Canada Gap is way beyond where we're at right now. We don't have the infrastructure, and I don't think the cost would make sense for the size of our business."

This may be due in part to how Canada GAP certification fees are structured – each crop that is certified requires an inspection (each inspection has a cost) - which inadvertently penalizes diversified farms growing several different crops, when compared to a grower only producing a single crop. Likewise, the administrative burden of certification to a diversified farmer is exponentially more than a single-crop grower.

Similarly, other regulatory agencies set up to regulate larger scale growers (such as the BC Vegetable Marketing Commission) ultimately require small scale growers to significantly change their business model. For example, it is expensive to join the BC Vegetable Marketing Commission and membership dictates where a farmer can sell their produce; the lack of autonomy over sales channels, as well as the additional cut taken by the required distribution agency makes it untenable for all but large-scale growers.

v) Regulatory findings

In conversation with interviewed farmers, it is clear that there is confusion regarding what regulations and licensing apply to fruit and vegetable production for many small farmers in the region. Often it is the case that incorrect or outdated information is spread by word of mouth, or there are misinterpretations of information found online. The licenses and certifications required and their corresponding fees are intimidating for many small to medium farms that want to initiate selling to wholesale markets. For farmers at this scale, margins are already tight so any additional expense is examined carefully. For many farmers, the value of the opportunity outweighing the financial and administrative burden is unclear. For this reason, it is likely that regulatory requirements for wholesale fruit and vegetable marketing and sales will remain a challenge for growth in this sector.

It is important for farmers to educate themselves on the relevant regulations, licenses, and permits if they wish to develop new sales channels in wholesale markets, as these customers will have an underlying assumption that all licenses/regulations apply. For example, on the vendor application form for a large BC grocery chain, a Safe Food for Canadians license number is required. However, if you are growing and selling within the same province you are not eligible to receive a Safe Food for Canadians Act license. In cases like this, it is the farmers' responsibility to explain that they are exempt from that requirement in order to move forward with their vendor application.

It should also be noted that, much like the Canada GAP certification, the BC Vegetable Marketing Commission requirements appear to be designed for large scale growers (e.g. large volumes of limited crop type) and presents as a regulation that is out of step with small and medium local enterprises in the region. Findings indicate that the BCVMC, ultimately requires small scale growers to significantly change their business model in order to participate in their framework. For example, for small scale growers it is expensive to become a member of the Marketing Commission and membership dictates where a farmer can sell their produce, resulting in a lack of autonomy over sales channels and reduced margins due to the additional cut taken by the required distribution agency. The Marketing Commission requirements make it untenable for all but large-scale growers to participate.

Lastly, understanding the definitions of critical words in regulations and how they apply to farms is also very important and can save a lot of time and money. For example, many vegetable farmers consider baby salad mix to be a "cut green" because they harvest the leaves by cutting them with a knife. These farmers could interpret the BC Food Premises Regulation to require the farm to have extensive infrastructure and Interior Health permitting in order to harvest and rinse baby salad mix. However, in the regulation "cut greens/lettuce" refers to chopped leaves, not the single cut required to harvest the leaf. In this case, the regulation does not apply to baby salad mix production on most farms.

Taking the time to learn about all of the regulations and how they apply will enable farmers to navigate a food system that has broader applicability to much larger producers. If working to include regional

small and medium sized farms in local wholesale market channels (grocery stores, institutions, etc.) is important to strengthening our food system; this regulatory scan finds that it will take many actors at every level (e.g. government) to enable and improve pathways for their inclusion.

vi) Opportunities

Interview respondents mentioned a number of potential opportunities to address the existing barriers to wholesale marketing in the region, as demonstrated in figure 7, which presents the number of interviews that mentioned a particular opportunity.

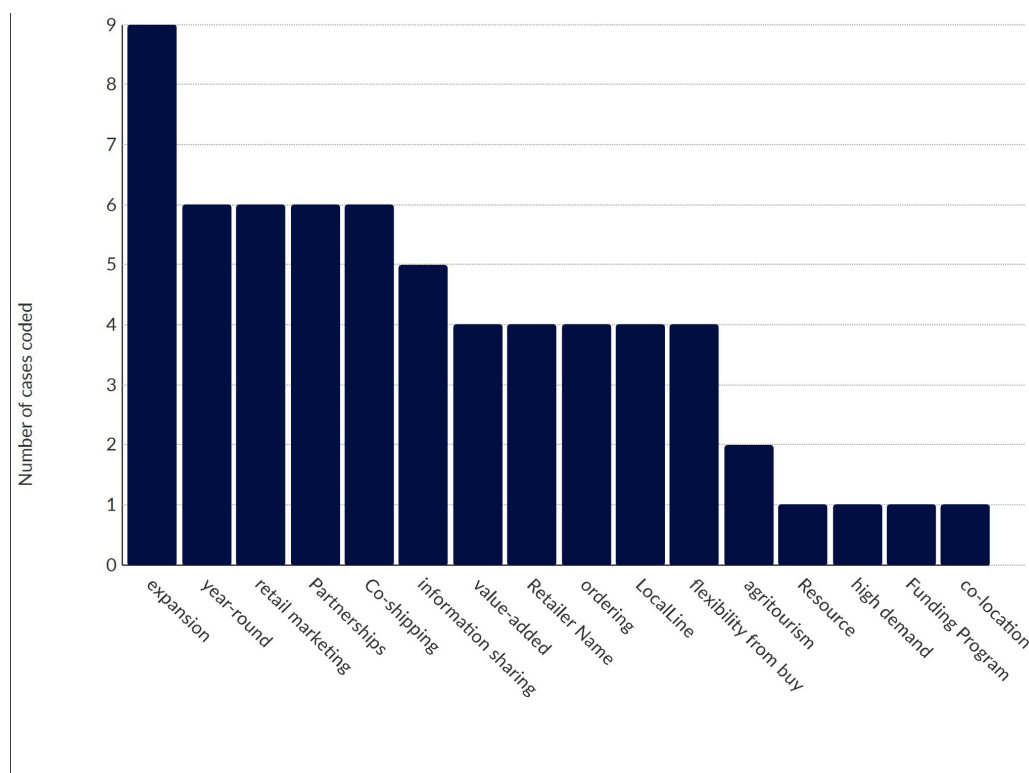


Figure 5: Opportunities mentioned by farmers, by number of interviews

In many cases, producers indicated if there were a market, they would have the opportunity to **expand** their production to meet that need (either by growing more of certain crops, or through physical expansion). Access to land did not appear to be a significant barrier among those farmers interviewed. As previously mentioned, storage infrastructure to allow **year-round** supply of storage crops presents a potential opportunity. Local producers enjoy producing storage crops such as beets, but find little market for these crops. This opportunity may require an increase in regionally available storage infrastructure as well as some consumer education.

Many farmers saw increasing their sales to retail outlets as a benefit in terms of raising their profile in the region (saw it as a **marketing opportunity**), with a few local retailers highlighted. **Partnerships**, in general and when it came to **co-shipping** product, storage, ordering, marketing, distribution/transportation and information sharing amongst producers were described as beneficial and an opportunity to address some current barriers such as the administrative and infrastructure needs of scaled-up wholesale sales channels.

b) Retail Interviews

Interviews were conducted with ten retail establishments, focusing conversation with store produce managers. The following provides profiles of the different store types and interview findings. Requests to speak with the head-office of corporate chain retailers, or simply gain permission to speak with corporate store produce managers were unanswered.

i) Retail Market Profiles

Corporate Chain Retailers

Chain Retailers include large corporately-owned grocery stores, operated by centralized headquarters who oversee sales/procurement and operations. In the North Okanagan, increasingly the Jim Pattison Group owns most chains (i.e. Save-On-Foods, Nature's Fare, Buy-Low Foods; whereas Safeway/FreshCo are owned by Sobeys Inc.). In these stores, ordering is done through a centralized warehouse and produce managers have little to no autonomy. As such, few products are purchased directly from local farmers, despite any interest they may have in local products.

Warehouses are designed to purchase large volumes from large producers, to ensure efficiency of distribution and cost. In this model, large scale producers are favoured, and supply requirements are designed to address the specifics of procurement at this scale (i.e. volume and food safety requirements).

Franchise Stores

Franchise stores represent businesses that are individually owned and operated separately from the corporation, often in smaller towns. This allows both independence and often strong community engagement/values, as well as close ties to corporate warehouses for supply. While these stores do some seasonal direct-from-farm purchasing, this appears to be capped (to approx. 20%). The interest to increase the supply of local produce will vary from store to store, based on the owner and level of autonomy of the produce manager.

"A franchise is not as corporate as others. We can purchase more local but policy favours warehouse purchasing"

Independent Grocery Stores

Independent grocery stores vary in their size and market. They present as a standard grocery store (in most cases offering the same variety as a chain store), but can be set up to cater to specific clientele (eg. an older generation looking for bulk/low cost local produce). All are procuring wholesale volumes of produce. Most independents are family owned and operated. Many of these stores have long standing relationships with farmer suppliers and feature local products in season (e.g. items with a short harvest window like corn, berries and asparagus). Most indicated that they do not offer much local produce over the shoulder season/winter months. While these stores will claim purchasing of 40-90% local produce (in season) they still rely on large distributors who supply from central warehouses (described in the next section).

Small Independent Retailers

These stores represent small retail spaces that often provide niche offerings (e.g. local, organic, vegan, etc. products), including greengrocers and “general stores” within small communities, as well as businesses who offer home delivery of local food boxes.

Most small independent retailers in the region have long standing and well established relationships with farmers. It is rare that they have the capacity to purchase from new farmers. These strong relationships are beneficial for established farmers, but as a result these retailers do not represent a large opportunity for emerging or expanding farmers. That said, collectively, these small stores may benefit from a local aggregator who can increase their access to storage crops in the shoulder season/winter months and who can offer more regular delivery (e.g. twice per week).

ii) Retail Insights

a) General Observations

Lack of Transparency

Retailers’ **lack of willingness** to participate was one of the major barriers to the study. Independent grocers were both more interested in sharing about their procurement practices and generally more transparent and/or knowledgeable of their local food procurement processes. However, most responses by produce managers with regard to volumes, price points and percentages appeared to be estimates (in one case we suspect a substantial overestimate). The majority of corporate run chain retailers declined or ignored invitations to participate.

Defining “Local”

Each retailer defined “local food” slightly differently. The independent stores defined local food as food grown in the Okanagan bioregion, in the Okanagan Valley, within 100 km of the store, or within an hour drive from the store. The chain stores all defined local food as food grown within BC, stipulating that while they did purchase food from the Okanagan it was not a requirement to be considered local. Others interchangeably spoke about local as BC and within the Okanagan (e.g. where some put “local” stickers on BC product and/or Okanagan product).

Autonomy of Purchasing Managers

Interviews revealed, unsurprisingly, that **independent stores have more autonomy than chain retailers** to choose when and how much local food they can purchase. One independent retailer emphasized the importance of fairness or equal opportunity to local farmers who sell to their store.

I have full control over who and where I purchase from. A lot of the time there are small farms that are able to bring their product in, which gives us great diversity in the type of varieties we can access/offer.

One of the franchise produce managers noted having autonomy to purchase direct from farmers using cash, while the others described having to source from their warehouses per company policies (stating that only local product that can supply the volumes that corporate headquarters specifies would have their product enter the store).

Warehouse-Store Relationships

If not purchasing an item directly from farmers, independent retailers buy from large scale, centrally located distributors/warehouses that cater to independent grocery stores (rather than attached to a larger corporate businesses model). The independent stores shared that they choose to source from the warehouses because:

- They have more variety
- They have lower prices
- They are consistent and reliable for supply
- If quality is poor the retailer is credited for their purchase
- It's convenient; with multi-week delivery options

The warehouse sends a list of availability weekly so we always know what is in season or coming soon. Also there are deals to be made if there is an abundance of certain crops.

New Vendor Procedures

In many cases, independent grocery managers work to develop relationships with farmers through interviews and farm tours, to better understand farm practices, ensure quality and verify claims (e.g. no/low spray, no GMO, fair treatment of farm workers). Interestingly, independent grocers do not specifically require food safety certification like Canada GAP. However, one store indicated that when a farmer gets to \$5,000 - \$10,000 in sales, they want them to consider Canada GAP certification, citing increased risk around handling as the reason (e.g. greater volume means more handling and more opportunity for mishandling).

Here is what others (independent stores) had to say about certifications:

The more certified they are, the safer it is to purchase from them, for us, and from the perception of the consumer...We feel certification is important to alleviate fears customers have.

We need to see proof for organic produce, but there are no other requirements for local produce.

GAP certification is overkill

Chain retail produce managers seemed to be more disconnected from the vendor application process. For example, one manager shared that they were unsure of the process because the vendors were set up by a distribution centre to check for quality. Other managers commented on the hassle of the certifications required for new vendors:

We don't have time to check certifications, but we try to avoid having GMO food. Sometimes we will go to see a farm's operations.

There are too many laws. If we have a farmer come up and he has beautiful affordable produce he has to be Food Safe Certified and the product has to be corporate inspected and certified. We would love if he had more freedom to work with farmers' to source.

b) Barriers:

Restrictive Purchasing Policies

Chain retailers indicated that even though they have the capacity and/or customer interest to purchase more local food at specific store locations, corporate policy favours warehouse purchasing and requires farmers who want to sell to a store to engage with bureaucratic administrative processes to ensure various requirements/certifications before sale.

Interviews with retail chain stores in a franchise model indicated that under their corporate umbrella, stores can order no more than approximately 20% of their product from local sources, not connected to the store's warehouse. It was shared that anything above 20% direct ordering would be noticed by corporate headquarters. This puts an automatic cap on potential local purchasing. Anecdotal information suggests that the non-warehouse purchasing "allowed" for major chain grocery stores is even lower (than franchise), at around 10%.

The feasibility of local farmers selling to central warehouses could be explored but would likely have high minimum volume requirements due to the high number of stores being supplied and may see produce travel to centrally located warehouses (e.g. in the Lower Mainland or Alberta) and back, in order to supply Okanagan stores. In addition, if supplying a warehouse, Canada GAP requirements would likely also apply. According to farmers, the regional chain grocery stores they are selling to either require GAP certification (e.g. certification must be shown in vendor onboarding process) or have announced to farmers that they must be GAP certified by a certain date in order to continue supplying to that store. All local independent grocery stores that were interviewed as a part of this study (5 total) indicated they do not require GAP certification (one stated that sales from a single farmer that exceed \$10,000 would trigger a conversation for the need of GAP certification).

Percent Local Procurement

While a number of independent grocery stores do purchase a substantial amount of local product (40-80%) across a year (mostly in the growing season/summer months), others purport to do so to a very high degree (i.e. 90% during the summer/growing months). Unfortunately, local purchasing to this extent could not be corroborated by local farmers, suggesting a gap in information about what is actually being procured from local farmers compared to what is ordered through mainline distributors/warehouses. It should be noted that all produce managers we spoke to were estimating the amount of local produce procured over a season or year – none had specific numbers or would share it if they did. In all likelihood the data we were seeking is not tracked, and retailers would need to be incentivized to make collecting this data worth their time. This lack of tracking presents a barrier when asking stores to do better – there is no baseline data to grow from.

Quality and Consistency

When asked about challenges they face in procuring local products, retailers cited issues with consistency (e.g. regular/convenient delivery and ongoing/consistent supply) and quality of local product. Some produce managers have experienced issues of local product not lasting on store shelves as long (though the opposite is true for others), this may be due to poor post-harvest handling and lack of infrastructure needs for certain crops locally.

A franchise store interviewed demonstrated interest in expanding its supply of local produce, especially in the case where there could be a guarantee that any poor quality produce could be sent

back for a refund and/or replaced (as is offered by corporate suppliers). Others stated that expansion of local would be possible if the pricing was affordable (according to what customers will pay, which also relies on minimal mark-ups by retailers) and twice per week delivery offered (as well as year-round supply).

Price is challenging too. If we can sell beautiful strawberries [from Mexico] for \$6/lb and a 500 g pack of local strawberries costs \$9.99, we won't sell it. We would buy bulk berries if we could though -at the right price. Some farmers are great to work with and others believe that their product is niche and so should cost more...I don't agree with that.

Most independent grocery stores have strong values toward community support (e.g. donations toward local initiatives) and ensuring customer trust (e.g. offering “good local produce for good value”). They indicated that maintaining customer “trust” includes ensuring consistent supply of local products that customers love, which doesn’t always align with farmers availability or schedules. It seems expectation management is key in these situations.

Low demand for organic

Lastly, organic produce doesn’t feature strongly in any of these stores within our region, despite the fact that we have a large number of local organic farms. Again, in reference to “trust”, produce managers do not want to be seen to be “price gouging” or charging more than what managers consider “good value”. They have indicated that willingness to pay for certified organic produce is less than for non-organic, local products.

c) Opportunities:

Top Crops Currently Procured

Retailers interviewed purchase a range of crops from the Okanagan and Shuswap regions, with the most common mentions summarized in Table 11 below:

Table 11: Top crops procured in 2022 by interviewed retailers (by number of mentions)

Storage for Cool Season Crops

Seasonality raises an interesting point – many produce managers support local purchasing of specialty, in-season produce that has a short harvest window and little storage ability (e.g. asparagus, berries, new potatoes, corn). Interviews indicated that few had considered the opportunity to expand procurement of local storage crops through fall and winter months. However, many expressed an interest to do so – to increase purchasing of local russets and other potatoes, carrots, and cabbage, especially if they were bagged or packaged (e.g. 2-5 lb bags). These crops include carrots, potatoes, cabbage, beets, onions, garlic, winter squash, and apples.

As noted, many farmers indicated the ability to scale up production of these crops if there were a ready market, indicating potential for market growth for these crops.

Demand for other crops with reliable contracting could provide farmers the reliable sales channels they need to grow production to meet local demand. This presents as one of the best opportunities; with storage infrastructure there could be a market opportunity for storage crops to be sold year-round.

The greatest opportunity is to fill the winter gap.

Crop Name:	Total Mentions:
Apples	4
Potatoes	3
Carrots	3
Lettuce/greens	3
Corn	3
Stone Fruit	3
Garlic	2
winter squash	2
Blueberries	2
Raspberries	2
Beets	1
Onions	1
Pears	1
Asparagus	1
Haskaps	1
Tomatoes	1
Cabbage	0
Beans	0
Microgreens	0
Grains	0
Radish	0

One chain retailer mentioned:

Our customers are always asking for local garlic, but we can't get the local volumes we [the corporate warehouse] need so we end up purchasing from China.

In order to expand local food procurement, independent grocers were interested in continuing to build relationships with farmers. One retailer, who sets their weekly pricing on Sundays, cited a need for a system to facilitate local procurement each week. They also mentioned it would be helpful to receive marketing materials from the farmers to advertise their produce.

Imagining Local Demand Potential for Carrots



What market potential would exist for local farmers if independent grocery stores in the North and Central Okanagan committed to purchasing local year round?

We estimate that Independent grocery stores procure between 25,000 and 50,000 pounds of carrots annually, per store (based on interviews). This is based upon a small sample, but even so we can calculate a hypothetical demand for the region. We know there are 8 independent grocery stores in the North and Central Okanagan combined, for a **total annual demand between 200,000 and 400,000lbs of carrots**. Note that some of this demand is already currently supplied by local product, but it does give a sense of the potential. For example, currently the local farmers interviewed produce at least 55,902 lbs of carrots annually. Some of the farmers interviewed indicated they can scale up production to meet local demand, if the market were created (but that volume potential remains undefined).

We do not have data on the market share of these independent grocery stores vs. chain grocery stores in the region, but anticipate it to be very small compared to the corporate chains. As such, one can imagine the opportunity that could exist if corporate chain grocery stores could be incentivized to increase local procurement (e.g. by even 5-10%). A recent thesis indicates that 73% of total food grocery store sales in BC in 2018 were attributed to supermarket chains.¹

As noted earlier, poor access to data limits the analysis that is possible. In order to deliver a more robust estimate, additional and better quality data would be required.

¹ Blomley, E. (2023) Farm to School in BC: The Role of Food System Planning in Facilitating Local Food Procurement for Schools, page 8. <https://theses.lib.sfu.ca/7401/showhttps://theses.lib.sfu.ca/7401/show>

As mentioned, we had hoped to provide analysis regarding available supply and demand (to present side-by-side), but faced difficulty obtaining data on market potential from retailers and had incomplete data from farmers in some cases.

d) Institutional Interviews

i) Institutional Profiles

Interviews were conducted with three institutions, sometimes including multiple contacts within one institution, as a way to both better understand procurement practices, opportunities and barrier, but also in attempt to build relationships with local institutions who see opportunities to increase local food procurement.

The following outlines findings from conversations with each within the sector profiles.

Interior Health

Interior Health (IH) oversees 55 sites across the health region (i.e. beyond the regional district boundaries) including 5 hospitals (Salmon Arm, Vernon, Penticton, Kelowna, Kamloops) and a number of long term care and rehabilitation facilities. The Vernon and Penticton hospitals include production kitchens that make meals that are shipped to all IH locations. Each production kitchen has a different focus. The Vernon hospital makes entrees for all locations, whereas Penticton specializes in pureed foods and “dinners at home”. Production kitchens are growing larger and meals are also being distributed to Northern Health. IH produces 1.5 million meals per year and works to source as many of its products as possible from BC and Canada.

IH food services is contracted by Aramark, who largely use Sysco as their food supplier/distributor. Additional food suppliers used by IH fall under the Aramark umbrella (e.g. Snow Cap, Centennial Meats). Due to contract obligations, procurement cannot deviate from using Aramark suppliers. For this reason, any supply of local ingredients that can go through Sysco, should be set up to do so, and is required to be Canada GAP certified (without exception). For items that Sysco cannot supply, there is an opportunity to set up a “billing schedule” directly with a supplier (not currently being done). At this time, IH does not procure raw, whole fruit or vegetable items but rather uses only chopped/processed vegetables, packaged based on portion sizes required for standardized recipes.

Currently, menus and ordering are standardized across all IH locations, with some flexibility in ordering and menu rotation in long term care homes. IH uses a procurement system that contains all details for meal production and distribution so that “everyone knows what is coming”. For example, this includes volumes of products, days for delivery, and a daily/weekly menu plan. This ensures that each site knows exactly what meals are being offered and how products are being used. Adding a local product that is not included in the usual streamlined system (e.g. local lettuce delivered direct from farm) would require detailed instructions and an adjustment from what staff are used to doing.

IH is in the process of moving toward the use of diet management software and a patient ambassadors program to provide greater meal choice for/by patients in order to increase dignity in care and reduce waste associated with standardized meal provision (e.g. limited/no choice). Further, IH is developing a Traditional Foods Program, to offer culturally relevant/appropriate foods to Indigenous patients. In its first year foods included bison stew, three-sisters soup (i.e. beans, squash, corn), and certain herbs and saskatoon berries. This program will be expanded over the coming years, with the hope to source Indigenous grown/harvested foods.

On top of patient meal provision, hospitals have “retail spaces”/cafeterias to serve staff and hospital visitors with affordable meals to purchase. These spaces were severely impacted by Covid-19 (e.g. no visitors allowed and staff shortages to operate) and continue to operate at a reduced capacity. As a result, IH will be updating spaces with new cashier software and renovating and relaunching cafeterias in some locations beginning this spring/summer 2023. This will include revamping menus and food offerings.

Okanagan College

Okanagan College has two campuses in the North and Central Okanagan (as well as one in the Shuswap and one in Penticton), with the largest located in Kelowna, which houses approximately 100 residences/beds and hosts approximately 7000 people per day. Currently the Kelowna campus is building 200 additional residences.

Okanagan College does not currently run its own food services/cafeterias, but rather operates a “grab and go” Market (Kelowna campus) and also contracts third party vendors who offer meals on campuses. Unique to the Kelowna campus is a Culinary Arts program that operates Infusions Kitchen - a training kitchen/restaurant for culinary students that is open to the public and also provides some pre-made meals/desserts to The Market. Infusions kitchen is operated much like a restaurant. Culinary Arts was recently revamped to showcase local food. This includes student field trips and procurement relationships with local farms.

The Market is a small retail space that offers 200-300 pre-packaged, “grab and go” meals per day, such as salads, sandwiches, soup, sushi or “bowls”, procured from local businesses (mostly from the Okanagan), and to a lesser degree from the culinary arts program. Occasionally they will also sell fresh, whole fruit.

Third party vendors on campuses operate through a contract with Okanagan College Ancillary Services. These service providers are mostly new this year and were chosen based on their interest/attention to fresh, local food. Contracts with vendors do not specifically require the use of local food (or define local food) but are required to have menus approved by Ancillary Services.

UBC-Okanagan Campus (UBCO)

UBCO is the largest post-secondary institution in the Okanagan. The campus hosts over 12,500 students and houses 2,100 students in residence. In 2019 UBCO took control of its campus food services when its contract with Aramark ended, and developed strong Food Vision and Values to guide purchasing decisions. In all, Food Services manages 11 different food related businesses on campus, including cafes, a coffee shop, catering services, fast food outlets, a convenience-type store, and a large dining hall.

In 2021, UBC and Land to Table partnered with Food Services and the Institute for Community Engaged Research (ICER) at UBCO to build relationships across a value chain (from farm to institution) to increase local food procurement at the new Pritchard Dining Hall. Project partners tested a model for procurement, aggregation and distribution from small scale farmers in order to connect students to sustainable, nutritious, fresh foods through the new Pritchard dining hall all-you-care-to-eat dining model. Overall, the vast majority of food (including local produce) is purchased and prepared through the Pritchard kitchens, with a smaller portion going to the Sunshine Cafe, which doubles as the catering centre/kitchen. Approximately 1,500 students are on a meal plan, accessed through Pritchard, resulting in an average of 2.4 transactions per student per day, and up to 4,000

transactions per day. Currently, food services operates all year round, with the majority of services during the academic year, but with many catered events running in the spring and summer months.

Despite attention to local food purchasing, the bulk of food procurement is done through mainline suppliers, like Sysco, under contract. However, over the past two years, UBCO has purchased around 30,000 lbs of local raw, whole vegetables and 17,500 lbs of local apples (and 2,700 litres of apple juice) direct from local farms. Slowly, the use of local produce on campus is being scaled up to other locations, and also through preserving/pickling seasonal items, and campus engagement events like apple tasting and an “ugly carrot contest” and tasting event. UBCO is exploring offering local produce to students through a CSA, where local produce “seconds” (or mis-shaped or smaller produce items not desirable for retail) can be offered to students at a reduced rate. In the coming year, UBCO Food Services will explore developing contracts with local growers to further commit to purchasing at this scale.

Overall, UBCO Food Services is committed to developing long standing relationships with farmers in a manner that helps to incentivize the development of local infrastructure, such as aggregation to allow for more produce to arrive on campus in a streamlined manner (e.g. fewer deliveries and fewer invoices). UBC overall is working to “institutionalize” local food purchasing that prioritizes values like “organic” and farm workers’ rights, as well as fair treatment for farms/businesses, as key to supporting a more localized food system.

ii) Institutional Market Insights

a) Opportunities:

All of the institutions included in this study are looking for opportunities to increase local food procurement, in large part with support from the Feed BC program. Each institution included here is sourcing Okanagan and BC-processed and prepackaged ingredients and meals as well as beverages. One vendor operating through Okanagan College indicated that they endeavor to bring local food into their meals as much as possible. In addition, all have shown “good will” toward finding ways to further increase local food procurement and explore how raw/whole fruit and vegetables may factor into that.

Based on the success that UBCO has had working directly with a small-scale farmer/aggregator, the opportunity to map and slowly increase the supply of local fruit/vegetables from the same aggregator across multiple institutions would be ideal (from a local business/market development perspective).

For Okanagan College, campus growth will dictate the need for new kitchens and may provide greater opportunity for procurement of raw/whole ingredients. While the Culinary Arts program has some established relationships with local farmers, it is possible that a local North Okanagan-based aggregator may be able to supply new products to that kitchen.

For Interior Health, with new systems coming into play, and with an emphasis on developing an Indigenous food program to offer culturally appropriate foods to Indigenous patients, there could be opportunities for local farmers to develop and supply specialty items to hospital food service programs. In the shorter term, the greatest potential may be for hospital cafeterias - to supply local processed products, like grab and go salads, which require no cafeteria staff preparation time.

b) Barriers:

Operations and systems in place across institutions vary widely, dictating the applicability and opportunity for use of raw fruit and vegetable items. Where UBCO is a leader in local fruit and vegetable procurement, others have referred to this kind of local procurement as a “long game”.

For Interior Health’s production kitchens, because hospital meals are not being “sold to customers”, the cost of food represents the main barrier, as mainline distributors offer better economies of scale over local procurement. While cafeteria spaces represent the greatest opportunity for direct local food purchasing in Interior Health, ongoing staffing issues and Food Services contract obligations may limit the use of raw/whole fruit/vegetable items. Grab-and-go type products would be best suited to cafeteria and retail outlets, but would need significant investment in local processing/packaging infrastructure and labour. Processed fruit and vegetable products were not included in the scope of this study. If local products could be successfully procured by the cafeterias, they would have greater potential to be transitioned/expanded for use in production kitchens.

Local procurement requirements for Interior Health include:

- Canada GAP certification
- Meets volume needs
- Consistent supply and regular delivery
- Offers a niche product (e.g. not available through Sysco).

While a local aggregation service may be able to meet some of these requirements, asking institutions to disrupt well established systems to include procurement of local raw ingredients that they are not typically equipped to manage, is a lot to ask, and is not likely.

Unfortunately, the opportunity for local supply of fruit/vegetables to institutions beyond UBCO at the present time remains limited.

iii) Community Service Organizations – Market Opportunity

In addition to retailers and institutions in the North Okanagan, there is also a myriad of food access and community service organizations who procure tens of thousands of pounds of produce annually for their programs. Land to Table is currently working with two organizations who are looking to connect to local farmers in sourcing produce for their programs. In some cases this is already happening to a large extent, with interest to develop more sustainable procurement practices and “do better for local farmers”.

One program is a volunteer-run, non-profit, bulk produce buying initiative which helps families access an affordable produce box in a once-monthly food box distribution program. Currently, this program distributes more than 1,200 boxes of produce per month, purchasing local (direct from farm when possible), but regularly purchasing from Okanagan Grown (the BC Vegetable Marketing Commission distributor).

Another program, with a new mandate to purchase local food, has a team of red seal chefs who prepare meals for clients that they house within their programs. They produce over 300 meals per day and will be expanding that to over 400 per day in the coming year. These programs rely heavily on donations from grocery stores; however, they are looking to source around 300 lbs of local produce per week from local farmers.

This is an example of two organizations among many in the region who have strong values supporting local food procurement and who have the budget, mandate, and operational capacity to connect with the local food producers to purchase produce in large volumes. Either as single entities or as a collective, the non-profit sector is another market opportunity for local farmers in the North Okanagan.



5) Discussion:

a) Opportunity for local aggregation

i) Farmer Views:

Interviews with farmers and retail purchasers would seem to indicate that some type of aggregation service designed to deliver produce from small and medium scale farms in the region could be of benefit (versus the already existing large wholesale distributors like Sysco or GFS). Producers were asked directly about the potential benefits and concerns of working with such an aggregator.



In many cases, farmers are busy farming and don't feel they have the time to grow the wholesale sales side of their businesses. In this context, most growers indicated that an aggregation service that handled the marketing/ordering relationships, deliveries, and in some cases storage would be a benefit. Additional services like washing of produce by the aggregation service were of interest to some growers (especially if this helped meet food safety certification requirements).

In our region, we've got a lot of great farms that could be pooling product. But we don't really have the piece that allows us to do that.

I like the idea of having someone else building the relationships with the wholesale clients...If there's someone focusing on that kind of work they're gonna have strong relationships, and they're gonna know what that client wants as opposed to us coming out green and trying to make those connections right away.

When asked about potential concerns, drawbacks or barriers of such an aggregation service, farmers cited the issues in dealing with inconsistencies in products (when aggregating from multiple farms); concerns over even slimmer margins in an already tight market for many crops (those high-value crops that need a high return, like salad greens for example, or those in a low-value market, like apples); and the general challenges in establishing something new that requires collaboration from busy farmers.

Overall, storage crops could have the greatest potential for aggregation (e.g. carrots, potatoes, cabbage, onions, beets) in an effort to increase supply of local food to retail outlets specifically over fall and winter months.

ii) Retailer views:

When asked whether a local aggregation service would be helpful, the independent retailers thought the service could be useful. However, the BC Vegetable Marketing Board (BCVBM) already helps bring a lot of growers and sellers together, and many of the stores already have strong relationships with farmers. Some retail produce managers expressed concern at losing the face to face relationships they had developed with growers, or the belief that farmers wouldn't benefit, and that quality control could be hard to maintain.

"We have good relationships with farmers - buying from an aggregator would need to ensure that it is truly benefitting more local farmers".

"If supply volumes are there and quality and freshness is there - then we would purchase [from an aggregator.] We are looking for consistency, quality and pricing but that's tricky to get locally".

"Yes - especially if delivering elsewhere in Vernon and willing to drop smaller volumes. We would be Interested in multi-week delivery".

Franchise and corporate store produce managers were also interested in the idea of an aggregation service, citing supply volume, quality, and reliability as their main concerns:

"Yes - this would be great. However, when we are paying a premium [for local] when I buy corporate then I can send product back [if poor quality or other issues]. We would like a local aggregator to consider taking poor quality product back".

"Maybe - if they can supply what our customers are looking for in the volume needed for all our stores"

Therefore, a local aggregator would need to offer a service that both achieved local food procurement and ensured equitable benefits for the region's farmers that are not already being achieved by other businesses.



b) Other Opportunities

As discussed, food safety certification can be a barrier for many small to medium scale farmers. There may be opportunity for group certification or programs to assist producers in navigating the certification process. Group Canada GAP certification is complex, but essentially allows individual farmers who are only harvesting produce to have a less rigorous inspection process compared to the farm/facility where all their produce is washed and packed along with other farmers in the “group”. Community Futures North Okanagan recently hosted an event to help producers understand Canada GAP, and offered an extensive Q&A with a retired inspector. Knowledge sharing events like this could build buy-in and capacity for Canada GAP in the small to medium producers in the region. Group field days, that allow farmers to walk through a GAP certified farm to see how certification is achieved, could take this learning one step further.

There may also be more opportunities for local institutional procurement with those less-regulated institutions, such as educational institutions (both pre and post-secondary), therapy programs in the health context, and local independent retailers (such as those already supplied by local farms). Third party food service operators (e.g. cafes), operating in institutions may also have potential, as well as commissary kitchens that service food trucks etc. (e.g. Zest Commercial Kitchen in Salmon Arm). Other potential sales outlets could be emergency food service providers and social service agencies.

The implementation of the BX Ranchlands Development Plan in the region may be an opportunity for partnership to provide land to farmers looking to expand, as well as a potential site for aggregation or shared storage. Similarly, the ongoing development of the Spallumcheen Agri-food hub may also create opportunities for partnership in this regard.

There may be an opportunity to negotiate wholesale prices at the beginning of the season (between farmers and wholesale clients) to help ensure stable prices to institutions/retailers over a season/period of time or purchase wholesale volumes under a sort-of CSA model (where half is purchased up front and the other half of the agreed to amounts at time of delivery). This could buffer against supply chain disruptions and price changes and help to stabilize institutional budgets (in the case where they are committing to purchasing a percent local), and would give local farmers consistent income streams.

Lastly, to facilitate ongoing relationship building, an organization such as the Land to Table Network, as well as other like Community Futures could support “matchmaking” events or tools with interested producers and buyers, to facilitate relationship building and enable both buyers and sellers to access a range of potential partners at once, cutting down on time required to pursue these relationships on their own.

Aggregation Factors for Success



Based on interviews from a supply and demand perspective the following outlines criteria for success that a local small scale aggregator/distributor should consider:

1. Focus on relationship development:
 - Stores don't want to lose relationships with existing farmers
 - Farmers want relationship development support with new wholesale channels
2. Offer post-harvest handling - washing, sorting, packing
 - Explore Group GAP certification
3. Buffer the retail/institutional payment lag for farmers (e.g. pay farmers up front)
4. Ensure strong quality control and product reliability
 - Refund/credit on poor quality product for unsatisfied customers
5. Increase convenience of local procurement (e.g. more regular and consistent delivery than individual farmers can offer)
6. Deliver a range of volumes - e.g. small amount for independent retail spaces; and large volumes for multiple chain stores
7. Specialize in storage crops - moving toward near year-round distribution of local produce

6) Recommendations

Despite the barriers and challenges outlined in this study, we believe that the following actions will help to advance local procurement in the region:

- 1) In the short to term focus on expanding local fruit/vegetable sales to local independent grocery stores, including the supply of storage crops over the fall/winter months.
 - a. Organizations like Land to Table and Community Futures to partner to offer events designed to create dialogue and build relationships between local retailers and farmers; to surface key barriers, old assumptions, opportunities and next steps.
 - b. Develop tools designed to offer “match-making” for local food procurement -farmer to buyer and vice versa (e.g. facilitate direct connections outside of events).
- 2) Short to medium term, develop a communications campaign to promote local/ independent grocers who sell local products, to build the customer demand for these sympathetic retail outlets.
- 3) In the short to medium term, develop a region-specific support system for Canada GAP certification for local farmers. This may include: a local coach, field days, panel discussions, grant funding etc.
- 4) Medium term, Land to Table continue to build relationships with institutions to support identifying/trialing lower-barrier procurement opportunities (e.g. in hospital cafeterias) to increase local food procurement incrementally. This may include continuing to understand and share the potential for specialty products that local growers can invest in producing to supply these markets.
- 5) Medium to long term, explore ways to encourage Corporate Retailers (e.g. Save On Foods) to engage with local organizations like Land to Table to support sourcing of local food to trial/pilot ways to increase local food procurement. This is suggesting that corporations take responsibility for supporting greater food system security and resilience and that the government may have a role to play to incentivize such programs/pilots. This could include the following:
 - a. Pilot direct purchasing of a certain percentage and/or number of local food items (e.g. 5-10% of produce or 3-4 different items) that also considers differently assessed food safety requirements (e.g. small-scale direct purchasing that does not require GAP certification because there is no traceability required if it is coming from farm to store, rather than a warehouse). This could be done on a store by store basis, with some autonomy given to Producer Managers to work with L2T/farmers.

- b. Land to Table to facilitate store to farm relationship building (based on experience/success of recommendation 1 above) - e.g. local farm tours with suppliers who deliver direct to store; group brainstorming sessions to streamline direct purchasing that deviate from corporate supply systems (e.g. scheduling, packaging) to ensure easy integration.
- 6) Medium to long term, support the development of small-scale aggregation business(es) in the region. This could include start-up funding, infrastructure funding, coordination, coaching, expertise, fundraising, etc.
- 7) Medium to long term, explore partnerships with local initiatives in terms of expanding storage facilities for winter crops (eg. Spallumcheen Agri-hub study, BX Ranchlands).



7) Conclusion

Background research indicates that the majority of the agricultural landbase in the North Okanagan is used for livestock production (either through forage production or grazing), with small amounts given over to fruit and vegetable production. Despite only hearing from a relative handful of fruit and vegetable farmers in the region, early indications are that significant amounts of product are currently grown. Given a favourable market climate, if demand for local produce was higher, there would be much potential in terms of farmer interest and ability for land conversion to scale up production of fruits and vegetables for wholesale channels.

The current systems for purchasing, observed in this study, were designed based on large scale agribusiness models, rendering small and medium scale farmers unable to compete or meet the necessary standards to sell into the wholesale market, with few exceptions. The system prevents the community from easily supporting local food and puts the onus on the consumer to seek out local foods. However, there are few accompanying resources or educational opportunities for consumers about these challenges.

This study focused on local fruit and vegetables specifically, with an early assumption that these products were “lower barrier” in terms of pathways for sale to wholesale market channels. While our work reveals potential for increased local procurement, albeit in smaller institutional clients and food service sales outlets as well as independent grocery stores, there remains the significant hurdle of food safety certification, as well as the limitations to non-warehouse procurement faced by chain or franchise retailers. As long as corporate retail outlets require Canada GAP certification, small to medium scale farmers will face unrealistic certification requirements, which are a major disincentive to pursuing these market channels. Additionally, as long as grocers require procurement from central (not local) warehouses, local procurement will remain extremely limited.



In the case where locally owned/independent grocery stores have greater flexibility to support small scale farmers, this seems like a logical place to focus next steps, especially in terms of increasing supply of storage crops to retailers in the shoulder-season and winter months. However, barriers to local supply must be addressed, but worse, there seems to be a trend where local independent grocery stores are being bought out by corporate chains. This is of concern when these chains require onerous regulations and favour corporate supply. In this regard, we believe there is an opportunity for those stores to purchase minimal local produce - when spread across all chain grocery stores this could have an impact for local farm businesses.

Furthermore, in some cases it would seem that local produce managers could be better informed about the difficulties local farmers experience to supply stores when they have minimal guarantees for ongoing sales. There is great potential for local, independent grocery stores to champion local food - to offer greater accommodations and/or goodwill to local growers who are interested in increasing sales through these channels - and in turn better support local food security (to ensure small-medium sized farms are viable and available in the long term).

Earlier studies (such as the KPU Okanagan Bioregion Institutional Procurement study undertaken in 2018) identified many barriers and challenges, many of which are corroborated by this specific case study assessment. As with that study, it was difficult to get retail collaborators to divulge information - despite indicating that no individual or store would be referenced. Trust will need to be built up over time to break through these barriers to access more transparent data in order to better understand the true market potential for local produce.

The Okanagan Bioregion Food System project, also by KPU, as well as the aforementioned procurement study, both identified a critical need for post-production infrastructure (at least at a minimal processing level) in order to realize the benefits of a local food system. This study reinforces that need with the finding that institutional clients require minimally processed product and are not often equipped to utilize whole product.

For expansion of wholesale market channels to occur in a way that benefits our local farm businesses, decisions will need to be made in terms of how and where resources and efforts are expended, to maximize chances of success and minimize frustration. Essentially, the ability to support viable local farm businesses, and allow small farms to grow, will require investment in a local value chain that acknowledges: the community benefit of such connections/infrastructure, and sees food security in the Okanagan as an important endeavor. While there is good will toward this idea, greater commitment to farmers is key. As one institution executive says: *We actually have to work against the global system in order to do better business, and that is what local food procurement is aiming to do.*

8) Appendices

Appendix A) Farmer Interview questionnaire

INTERVIEW QUESTIONS: FORM

1. How many acres do you have in production?
2. Do you practice any of the following growing practices or certifications:
 - Certified organic
 - Certified natural
 - No spray
 - Other:
3. By volume, what are your top three crops or varieties?
4. How many pounds do you produce of each of those crop in an average year:
 - Crop 1:
 - Crop 2:
 - Crop 3:

Pricing: This information will help us figure out if/how there is a gap between the price farmers need and what is willing to be paid.

5. What price do you sell your top three crops? Please provide a specific price or a range. If you already sell bulk/wholesale, please include that price instead of direct sales price.
 - Crop 1:
 - Crop 2:
 - Crop 3:
6. If you do not currently sell in bulk or wholesale, do you think you could offer a price lower than your direct sales price to a wholesale/bulk customer?

7. What are your current sales markets/channels (ex. farmers markets, restaurants, stores, CSA), and approximately what percentage of your sales is in each category?
8. How have your sales channels changed over time? How consistent are your sales channels each year? What factors have driven change (ex. Covid19 pandemic, extreme weather events, etc)?
9. Do you already sell to wholesale - yes then answer Q's X-Y

IF YOU DO NOT ALREADY SELL TO WHOLESALE CHANNELS (answer these):

10. What concerns/hesitancy/barriers do you see to selling your product to a wholesale market?
11. How interested in selling your product to a wholesale market are you? Why, what's the draw for you?
12. Without expansion, what is the volume of crop that you have available to sell to wholesale channels? (ex X lbs of X crop)
13. If a wholesale buyer would take your produce this season, would you be willing to have less to bring to your direct sales channels?
14. To what extent do you wish to increase production? How long would it take to increase production to that level? Which crop(s) would you want to increase production of (main season, shoulder season, or storage)? Ideally, would you sell your increased production to existing customers or new wholesale channels?
15. How ready to sell to the wholesale market do you think your business is? Have you thought through the logistics of storage, delivery, palletization, packaging, food safety certification, etc?
16. What are the biggest barriers to selling to wholesale channels (ex. Price, storage, standardisation, food safety certification, delivery, access to land, etc)?

17. If you were doing your own deliveries to a wholesale customer, what is the minimum order you would need to make it worthwhile, and how far would you be willing to drive?

If no, answer Q's Y-Z

IF YOU DO SELL TO WHOLESALE CHANNELS (answer these questions):

18. Do you have any concerns/hesitancy/barriers to selling more product to new wholesale channels?
19. Are you looking for new customers? What volume of crop do you have available to sell to new wholesale channels? (ex X lbs of X crop in 2024) Are there any specific crops that you would like to sell more of?
20. To what extent do you wish to increase production? How long would it take to increase production to that level? Which crop(s) would you want to increase production of (main season, shoulder season, or storage)?
21. To take on new customers or grow your production would you need to improve: storage, delivery, palletization, packaging, food safety certification, etc?
22. What are the biggest barriers to selling to new wholesale channels (ex. Price, storage, standardisation, food safety certification, delivery, access to land, etc)?
23. If you were doing your own deliveries to a wholesale customer, what is the minimum order you would need to make it worthwhile, and how far would you be willing to drive?

EVERYONE Answer (based on wholesale questions above):

24. What actions/initiatives could be put in place to address the challenges you've outlined above?
25. Would a small-scale aggregation service make it more feasible to sell to wholesale channels? What could it look like to be of benefit to you? What type of organization structure do you think would be best (co-op, non-profit, corporate, etc)? What issues do you see coming up that could prevent the success of an aggregation service?

26. What food safety practices do you currently have? What are your thoughts/feelings about food safety certification (ex.CanadaGAP, but there are other programs too)?
27. Do you ever donate product to charity organizations? If so, do you intentionally grow more for this purpose, or simply donate if you have extra (and to whom)? If not, are you interested in being connected to those organizations?
28. What does your future in farming look like in the next 1-5 years (where do you imagine your farm business to be)?

Appendix B) Retailer questionnaire

1. What is the definition of “local food” that you use? (e.g. BC, Okanagan, North Okanagan?)
2. To what extent do you currently purchase local food, from within BC and within the North Okanagan?
3. Can you say what percent of your produce is locally sourced (both BC and regional?)?
 - a) What products do you regularly purchase locally for top 3-5 crops?
4. What drives your local purchasing? E.g. is it store/corporate policy? Individual store management/interest/relationships? Consumer demand or interest? Supplier availability?
5. What other values might drive local? E.g. Willingness to pay for freshness/quality, etc.?
6. What is your system for purchasing local fruit and veg? E.g. through a supplier? From a centralized warehouse? Directly from farmers? For use in prepared food/meals?
7. If applicable, can you share more about the warehouse/store relationship?
8. How much autonomy does a store produce manager have to purchase local food directly and/or what is the pathway for a small farm to sell to the store?
9. Would/could you buy from a local food aggregator or direct from farmer? If “no”, why?
10. What regulations or requirements do you require of your fruit and vegetable suppliers or when setting up new vendors?

We are trying to better understand the demand potential for local fruit and veg. In order to do so, ideally you can share more about the volumes and price point that you are currently purchasing at for certain items. For example:

11. What are the top volume crops that your customers want to buy local? (can you share the volume demand and price point of those)
12. We are hearing from local vegetable and fruit producers that potatoes, carrots, beets, lettuce, cabbage are the most available in our region - if different from above, what is the volume demand and price point for these items?
13. Can you also share information about the price range - for organic and conventional items? E.g. the difference that you pay? (we can extrapolate but also we will keep this confidential)
 - a) Is this price point bulk, packaged or further processed?
14. Do you have a minimum order/delivery requirement (e.g. is there a min that you will purchase)?
15. If applicable: Is the price point different, if a farmer is selling to your warehouse versus directly to the store?
16. In your experience, what are the barriers/challenges you experience in procuring local fruit/veg? (e.g. process, policy and procedures, regulations/certifications?)
 - a) Any ideas for what could be done to address these barriers?
17. What local food items would you realistically like to be able to procure at your store?
 - a) E.g. what would be on your wish list (if all other factors lined up)?
 - b) In what volumes and price point for each (say 3-5 crops)?
 - b. What would make it easier for you to purchase these items locally?
18. Would a local aggregation business/service assist you in your efforts to purchase locally (where this still provides a closer point of contact to farmers)? Why or why not?

19. Does your store have a policy or system for donating products that can't be sold?
20. What kinds of food do you regularly donate and/or never donate?
21. Would you be interested in trialing a new app to be able to donate that product faster and easier (and to track donations over a period of time)?
22. To summarize - if you were to increase your local fruit and vegetable purchases, is there a checklist for what would need to be done to make that happen?

Appendix C) Institution Questions

1. How many people are you feeding, and what is the service model? This can include all the kitchens and outlets.
2. Can you share more about your Food Services operations and institutional procurement practices?
3. Where does food generally come from/through? What service providers do you use, what contracts do you have in place?
4. Are there any examples where you have direct supply from farmers/local food aggregators or businesses?
5. Does your food service contract prohibit or limit purchasing food from outside the contract?
6. How many facilities or locations are you operating/connected to?
7. To what extent is buying local important to your institution?
8. How do you define local?
9. Do you have specific procurement or purchasing policies in place that provide guidance for local food? (is this new or well established?)
10. Is there interest or buy-in across different departments and with org. Decision makers?
11. Are there other reasons or any incentives to purchase local food (e.g. after Covid and the floods of last year or with new programs?)
12. What percentage of purchases are local? Are you currently purchasing from Okanagan based farmers (e.g. directly, through a supplier)

13. To what extent are you looking to increase local food procurement?
 - a) Do you have specific targets or goals; specific products that you would like to offer through your food services; specific procurement/sales channels Or ideas for easy next steps?
 - b) In what volumes are we talking about (for the different aspects of operations)? Can you share more about product volumes and price points?
14. What current barriers are you experiencing when purchasing local?
15. What certifications, regulations or requirements must your suppliers follow?
 - a) How is this checked/verified?
16. Where do you see the greatest opportunities for purchasing local fruit and vegetables?
17. Are there specific products that you would like to procure?
18. What are the top vegetable and fruit products in particular that make sense to procure locally?

Interior Health Interview:

20. How many care facilities are located in the North Okanagan (number and type)?
21. What is the potential/opportunity to introduce local fruit and veg products (ingredients) into these facilities? (thinking about whole ingredients)

Appendix D) Regulatory Overview

Market Regulations Overview

Business Regulation



Local Regulations Checklist

- ☒ Start by talking to your fellow farmers because licensing and regulations change. Stay informed!
- ☒ Does your farm abide by **RDNO Zoning By Laws**?
 - If you farm in the physical boundaries of the following municipalities, check the local business licensing processes:
 - Vernon | Enderby | Armstrong | Spallumcheen
- ☒ Determine if **ALR rules and regulations** apply to your property (leased or owned).
- ☒ If there are any livestock present on your property, register for a free **Premises ID**.
- ☒ Once at a large enough scale, producers should determine if a BC Vegetable Market Commission license is required. Visit www.bcveg.com

Food Safety Regulations

Safe Food for Canadians

Do you export, import, or sell food between provinces?

You **MIGHT** need a Safe Food for Canadians license.

Do you grow, manufacture, process, treat, preserve, grade, package or label vegetables or fruit that will be produced, sold and consumed within British Columbia?

You **DO NOT** need a Safe Food for Canadians license.

The Safe Food for Canadians Act is federal law that modernised food safety legislation in Canada, and consolidated 14 sets of regulation into one. It mainly applies to food exported, imported, or sold between provinces



Determine if other products (ex. dairy, eggs, etc) or selling outside of your province will require a license [using this tool](#).

BC Food Premises Regulation

Do you sell **WHOLE** uncut fruits and/or vegetables?

YES

You are exempt, whole fruits and vegetables **DO NOT** require Interior Health permitting.

NO.

I cut and/or process my product (i.e. further cut after harvest)

The BC Food Premises Regulation is applicable to your facility. You need a Food Processor/Manufacturer Permit from Interior Health.

Learn more about the Food Processor/Manufacturer permit process [at this link](#).

Have questions about your product or idea? Email HP.Admin.Vernon@interiorhealth.ca to reach an Interior Health employee.

CUT FRUITS OR VEGETABLES

If you harvest a crop by cutting the plant (ex. baby leaf salad) this does not qualify as “cut” or “processed” produce for this regulation. If you were to take that leaf out of the field and cut it in half before you sold it, that would count as “cutting”.

Other examples of uncut produce include:

- Taking the tops off a whole carrot
- Fresh unpackaged vegetables /fruit with dirt rinsed off
- Fresh rinsed whole vegetables /fruits in a bag with a label
- Whole storage vegetables in a bag with a label
- Baby leaf salad mix rinsed, dried, and packaged in bulk in a large plastic bag, box, or in a plastic clamshell or bag with a label



Food Safety Regulations

Develop a Food Safety Plan

BC Good Agricultural Practices

- 1 Determine which food safety program/certification will meet the needs of your customers.
 - **CanadaGAP****
 - GlobalGAP
 - Primus GFS
 - SQF
- 2 Consult the provincial government's series of flow charts and a checklist to help you identify what food safety risks are present on your farm, steps you can take to mitigate these risks, and applicable legislation.
- 3 Use your learnings to develop your own Food Safety Plan.

IMPORTANT NOTE!

Not all grocery stores require food safety certifications. Contact your prospective grocery store customers to see what their requirements are.

****CanadaGAP is not required by the BC government BUT...**

Most grocery store chains, wholesalers, and distribution companies have chosen to use GAP as a requirement for produce they purchase.

CanadaGAP is a food safety certification program that was developed in Canada to promote Good Agricultural Practices (GAPs) for fruit and vegetable producers. It provides a complete framework to develop a food safety plan, keep accurate food safety records, and provides an inspection and certification process that is recognized internationally.

Purchasing from CanadaGAP certified farmers ensures that the Safe Food for Canadians Act and other regulatory requirements for these distribution and grocery businesses are satisfied, and helps to streamline their reporting and inspection processes.

