

Robson Valley Agricultural Market Analysis, Gaps and Opportunities Assessment and Implementation Plan

For: Community Futures Fraser-Fort George
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Executive Summary

Scope and Methodology

The Robson Valley Market Opportunity Analysis and Implementation Plan (RVMOA) had three core objectives:

- 1) To improve our understanding of which markets need to be considered by the Robson Valley agriculture sector,
- 2) To identify challenges and gaps, and
- 3) To provide recommendations for overcoming these challenges/gaps.

The project research included a background literature, census data and market data review, a local producer survey with 43 responses and 11 targeted interviews with food system stakeholders from within the region and beyond.

The final report provides a contextual overview of production, processing and sales within the Robson Valley, and describes the barriers and assets to expanding production and broadening sales channels. Using provincial data, provincial and national market research, and census data, market trends and potential consumer demand are described.

Study limitations due to scope constraints and COVID-19 pandemic restrictions result in 4 limitations that inform the 4 following immediate recommendations:

- 1) **Ground truth findings:** Hold a focus group for local producers and key partners to present report findings, recommendations and opportunities
- 2) **Institutional purchasing:** Explore the potential of the institutional purchasing market within the Robson Valley as a small follow-up project.
- 3) **Agri-Tourism:** Explore Agri-Tourism as a small follow-up project. Tourism statistics/potential were not reviewed as a part of this project, nor were tourism stakeholders and potential partners engaged.
- 4) **Organic Production:** Follow up with local producers is recommended to confirm that they are not experiencing an information or support gap related to knowledge, or organic markets, or organic transition

Five opportunities and associated actions related to each are recommended for implementation, and an implementation plan elaborates on resources and partners needed to bring the recommendations to fruition.

The five opportunities and sub-actions recommended are:

1) Increase sales through existing direct local channels.

- 1.1 Further evaluate and ground truth vendor gaps in nearby Farmers Markets
- 1.2 Connect with tourism sector and foster Agri-Tourism for farm exposure
- 1.3 Coordinate “meet your maker/ meat your produce manager” events
- 1.4 Increase box program and delivery sales channels through e-commerce training and support

2) Increase regional/ extra-regional meat sales and build red meat value chain.

- 2.1 Complete a regional abattoir feasibility study
- 2.2 Coordinate an information session re: grass-fed/ locally finished red meat and certification options

3) Capture increased market share of adjacent markets and wholesale channels.

- 3.1 Group training to meet wholesaler requirements (e.g. food safety system, packing and grading)
- 3.2 Establish CF-FFFG/agricultural marketing liaison and marketing support role
- 3.3 CF-FFG led value chain establishment

4) Establish a broadened Robson Valley cooperative (co-op) or collective.

- 4.1 Coordinate a guest speaker event (in the off-season) from established producer co-operatives
- 4.2 Conduct research on the business case for co-operatively growing, marketing or distributing specific crops
- 4.3 Complete a feasibility study, in partnership with producers, for co-operative storage of storage crops

5) Conduct Robson Valley specific production trials/ product research.

- 5.1 Complete applied detailed market analysis, production cost and business case planning for specific crops or goods
- 5.2 Co-ordinate on-farm season extension/ variety trials and research

Context

There is high agricultural capability in the region and diverse agricultural production in terms of both farm size and food produced. Many producers are engaged in livestock production, growing hay and growing vegetables. That is also a strong segment of “growers” who may not yet consider themselves “farmers”. Involvement in processing is moderate, while involvement

in Agri-Tourism and in certified organic production are quite low. Grass-finished lamb and beef are significant.

Local/Regional Challenges

Survey results indicate that the majority of Robson Valley (RV) producers are likely interested in expanding their business, but face barriers including lack of investment capital (including access to necessary equipment), lack of storage or processing infrastructure (in particular to abattoir capacity), time, climatic constraints, lack of an adequate local market, lack of labour (worker housing), lack of distribution/transportation infrastructure, and barriers associated with age. The key challenges for production in the Robson Valley, from the perspective of food system stakeholders from outside of the region and gathered through targeted interviews, concentrate around consistent and adequate volume of supply, climatic constraints and transportation costs. Access to land, natural capacity of the land, knowledge and agricultural capability were not noted as significant constraints. Policy and regulatory constraints were generally noted as a barrier, but this is not unique to the region.

Local/Regional Assets

An asset map was developed and is available at: <https://tinyurl.com/28xm8tv2>. This map displays the locations of regional food retail, distributors, processing and distribution infrastructure, lower mainland food retail, foodservice establishments, regional agricultural suppliers, and local farms. In addition to these physical assets, survey results indicate that the top strengths of farming and food production in the RV are the natural environment, human resources and knowledge/information resources.

Sales Channels

Advantages and disadvantages of different direct sales channels are described within the report, including their advantages and disadvantages as they relate to different goods (animal products, produce and value-added). These channels include direct to consumers (via online, email, phone etc.), box or shares programs, Farmers Markets, farm gate, U-Pick. Direct to small retail and direct to foodservice are also described in the report.

Survey results indicate that the majority of RV sales use “other” channels, followed by farm gate retail, box program and home delivery. “Other” is assumed to include a combination of livestock auctions, animal shares, trading among one another/through a cooperative, E-mail listservs and sales directly to marketing boards for supply-managed operations (dairy, poultry, B.C. Vegetable Marketing Board). Sales to grocer retail, wholesale/distributor, restaurant and other foodservice ranked very low as sales channels for RV survey respondents.

Geographically, a small majority of RV producers primarily sell their products locally. However, there was a fairly even spread between selling locally, regionally, in other parts of B.C. and in other parts of Canada (likely to Alberta).

Selling into wholesale channels, via direct bulk sales or through a distributor or broker comes with many requirements and presents challenges for small to medium producers. Very few RV

producers are accessing these sales channels, but it appears that the legal requirements (largely around food safety, packaging and labelling) are not the most pronounced barrier. The key and overwhelming barrier is a low level of production and lack of an economy of scale, leading to an inability to meet necessary volumes and maintain consistent supply. This barrier is followed by a lack of a regional marketing association and support, and being unsure of how to contact or establish relationships with distributors and larger retailers.

Consumer Demand

To get a rough idea of the size of potential local, regional and provincial markets, average household spending on fresh foods was calculated by the number of households in nearby communities, and then further filtered to look at spending of demographic segments with high potential. Demographic segments with high potential include households with no children or fewer children, household income of \$100,000 or over, or older adults of 45-75 years of age. Using these metrics, it is clear that the size of high potential consumer segments and the amount they spend annually on fresh food is significant, and has a high likelihood of growing.

The report concludes that there is growing provincial demand for local food (including in rural or northern communities), especially for produce and there is unmet demand for organics (provincially). Excluding potatoes, B.C. is heavily dependent on international imports of vegetables which account for approximately 63% of total consumption of vegetables. British Columbian consumer demand for some meat products is greater than what is produced locally, however, willingness to pay a premium for local meat or grass-fed beef is probably more concentrated in wealthier markets. Multiple sources report that consumers are always in search of more local eggs. While there are challenges to securing egg quota, production for sale at non-quota volumes could be an opportunity.

For small and micro-processing, past research indicates the new products that processors will have the best success with are those that replace gourmet imported food, and with specialty foods that the large processors do not find economically viable to market in large quantities. This is probably still relevant, but some of the products mentioned in more recent trend reports highlight the following as far as processed goods: plant-based proteins, local/ancient grains, semi-processed vegetables, pet products.

The majority of consumers are buying their B.C. product at Farmers Market and there is an opportunity for Farmers' Market vendors to capture additional shopper spending by diversifying their products offered or by selling value added products.

Gaps

Gaps are defined as a challenge identified in the report with no clear matching local asset/resource to resolve or address it.

Key gaps identified are:

Marketing and Distribution	<ul style="list-style-type: none"> • Consistent/adequate volume of supply • Lack of local market • Aligning with consumer values/ transitioning to higher value channels • Low access to wholesale/distribution markets • Low involvement in Agri-Tourism
Infrastructure	<ul style="list-style-type: none"> • Lack of distribution/transportation infrastructure • Lack of abbatoirs (especially Class A and B) • Lack of equipment • Lack of storage infrastructure
Human	<ul style="list-style-type: none"> • Age of farmers (succession planning and mentorship) • Lack of labour (skilled farm labour) • Worker accommodation
Natural	<ul style="list-style-type: none"> • Growing season, northern climate
Financial	<ul style="list-style-type: none"> • Cost of production/ profit margins (including small economies of scale)
Policy and Regulatory	<ul style="list-style-type: none"> • Support with policy and regulatory barriers

National/Global Market Trends

Food trend reports were reviewed from 2020 and prior, as well as forward looking reports making predictions of what will become lasting trends post-pandemic. COVID-19 has caused economic volatility in global markets and presented rapidly changing circumstances and disruptions to the agri-food supply chain. It has also changed consumer habits and preferences; accelerating existing trends, and causing new trends to emerge. Six key trends related to food consumption are discussed in the report: health and wellness, trust/quality of food, identity and community, local food/ food security, direct to consumer and ethical/sustainable food and packaging. Sales channels have also been affected. Spending ratios have move from a food retail/foodservice ratio of 62.38 to approximately 74/26 in late 2020. Online sales and e-commerce have skyrocketed.

Opportunities

Farmers Market opportunities are market-specific, demand on competition, and market policies regarding location of vendor farms. Preliminary research indicates there may be gaps in eggs, meat and value-added products. Retailers indicated an interest in carrying local produce, if they do not already have a local source of a specific vegetable. Interest was also expressed in carrying local grain, more “shelf stable” vegetables (like broccoli or root vegetable as opposed to leafy greens) and a consistent source of local honey. Some local retailers were interested in carrying local meat, but indicated they would have to change their insurance coverage to do so.

Based on targeted interviews completed, grocery chains are looking for items they don’t currently offer that are local, or local products that are available earlier or later than their current suppliers, or superior items (e.g. better flavour) to replace an item that is currently carried. Late season and high-quality, and/or or frozen fruits/berries, and storage crops outside of the typical season were emphasized as potential produce opportunities. Unique/novel items would only be an opportunity if associated with a well-resourced marketing campaign. Early season greens and local asparagus were also mentioned. Season extension infrastructure and emerging varieties for early or late production would be needed for the RV to compete in this arena at an extra-regional/provincial and/or wholesale level.

1.0 Project Background and Scope

The Robson Valley region has a long tradition of agriculture. Agriculture has been an economic driver in the region for over 100 years, and there are opportunities to grow the sector, including increasing production for local markets, reaching new markets, and diversifying production.

Community Futures of Fraser Fort George (CF-FFG) has initiated a new program to support Robson Valley producers in expanding their current operations by accessing new markets. The activities of this broader program will link to renewed discussions regarding food security within the province, as well as build a more resilient and diversified economy within the Robson Valley, by linking producers to markets within, or just outside provincial borders. Within this program, this Robson Valley Market Opportunity Analysis and Implementation Plan (RVMOA) has been completed.

Samantha Charlton (principal of Charlton Consulting) was hired to complete the Analysis and Plan. The project had three core objectives:

- 4) To improve our understanding of which markets need to be considered by the Robson Valley agriculture sector,
- 5) To identify challenges and gaps, and
- 6) To provide recommendations for overcoming these challenges/gaps.

2.0 Project Methodology

2.1 Primary Background Research

The first project step was a comprehensive review of background information. The list was initially developed through web searches and using Google Scholar. Local experts in the field, and certain industry associations and commodity groups were then contacted to ensure no key reports were missed, and to ensure the documents collected contained the most up to date information available. A list of approximately 95 documents was developed, and considered for review. The most relevant documents were reviewed in full and included in the project findings. Documents reviewed consisted of industry publications, market and trend reports statistics, consumer statistics and trend reports, reports from previous local projects, reports from other jurisdictions, Statistics Canada data from the Census of Agriculture, Demographic profiles and other Statistics Canada tables. The primary research methodology and questions were then developed in order to fill the most important data gaps that emerged from the background research.

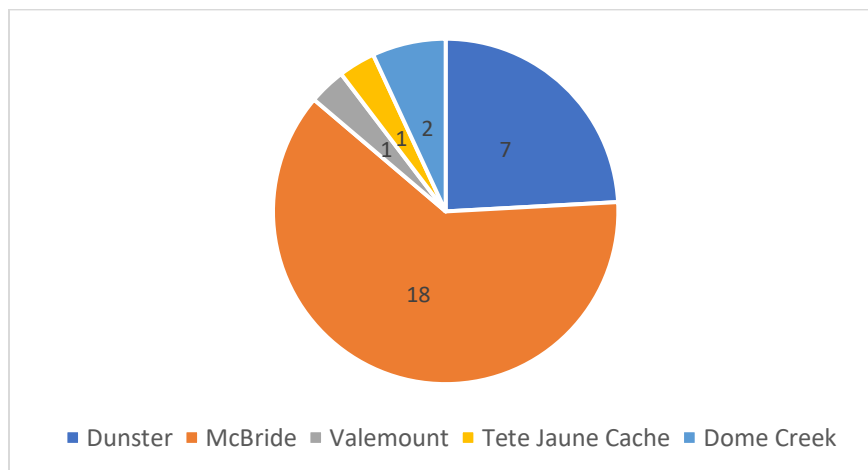
2.2 Robson Valley Producer Survey

One information gap identified in the primary research was current detailed information on Robson Valley production, and the needs and interests of Robson Valley producers. Thus, a 25-question survey, targeting Robson Valley Agricultural producers, was developed by the project consultant and refined upon CF-FFG review. The survey was hosted on Survey Monkey and was live from March 15, 2021 – April 19, 2021.

The survey was distributed and promoted through the following channels: an ad on Valemount Community TV ; an ad and article in the Rocky Mountain Goat (for 1 week); an ad in the Little McBride paper (2 weeks); via the McBride Farmer’s Institute email list; via CF-FFG website and social media; via McBride and Valemount Facebook discussion boards/ swap & buy’s; through a postcard mail out to Valemount (400), Crescent Spur (15), Dome Creek (25), Dunster (45), McBride (310); via a display at McBride Seedy Saturday March 27/28, 2021; and via displays at Dunster General Store, The Farm Store and Uncle Mark’s Butcher. In addition, three Mennonite Farmers were directly approached to solicit their participation in the survey. To review the full set of survey questions please see Appendix 1.

With 111 farms in the Valley (Statistics Canada, 2016), the survey target was a minimum of 33 responses (30%).¹ The survey received 58 attempted responses and 43 of these were eligible respondents². The survey had a 60% completion rate. The following pie chart shows the breakdown of respondents by geography.

Figure 1: Location of survey respondents



Survey results are reported throughout the report in the relevant report section.

¹ The survey response rate was successful when compared to typical rates. A survey response rate of 5-30% is typical, and 50% is considered excellent.

² Eligible respondents are defined as living in the Robson Valley and actively growing food or raising livestock.

2.3 Targeted Interviews

The primary research also revealed an information gap related to current information on food retailers and wholesalers, in particular their willingness/ability to source RV products. It was determined that 10-15 targeted interviews would be completed to get input from these stakeholders. While 10-15 interviews can only achieve a small sample of perspectives, these interviews targeted a mix of: food distributors/wholesalers, foodservice (restaurant and catering), local retail, regional retail, sector experts (e.g. agricultural e-commerce), and relevant programs from other jurisdictions (e.g. Cowichan Brand, Quesnel food hub). The interviews were focused on determining which products there is unmet demand for, which imported products could be replaced by local products, any trends or changes since the beginning of the pandemic, any recent or ongoing trends in general, product procurement criteria/processes and estimates of quantities needed for specific products. A four-part interview guide was developed to loosely guide the different conversations with 1) farmers, 2) retailers, 3) distributors/ wholesalers and 4) chefs or restaurants. See the full Interview Guide in Appendix 2.

A long list of potential interviewees was developed (Appendix 3) and the majority were contacted to request an interview. The 11 interviews completed reflect a prioritization of interview types combined with the contractor's availability to follow up with potential respondents and the availability of participants during the project window (Table 1).

Table 1: Completed interviews

Company	Type
<i>Retail (4 completed)</i>	
Robson Valley Essentials	Local retail mixed
Dunster General Store	Local retail mixed
Georgia Main Food Group (Supplier to Valemount IGA)	Local retail head office & distributor sister company
Infinity Office and Health	Local retail mixed
<i>Distribution/Wholesale (3 completed)</i>	
Associated Grocers	Wholesaler
Discovery Organics	Distributor
B.C. Fruit Truck	Distributor/retail
<i>Farms (3 completed)</i>	
Glen Valley Cooperative (Close to Home Organics)	Farm and farm wholesale
Hope Organics	Farm, e-commerce
Spray Creek Ranch	Farm, e-commerce

<i>Chef/restaurant (1 completed)</i>	
CMH Heli-Ski	Foodservice tourism

A complete contact list of stakeholders/organizations considered and contacted for an interview is included in Appendix 3, along with a description of the rationale for prioritizing the 11 interviews completed. Those who were not contacted or not available could be approached during a future program phase.

3.0 Agricultural Context

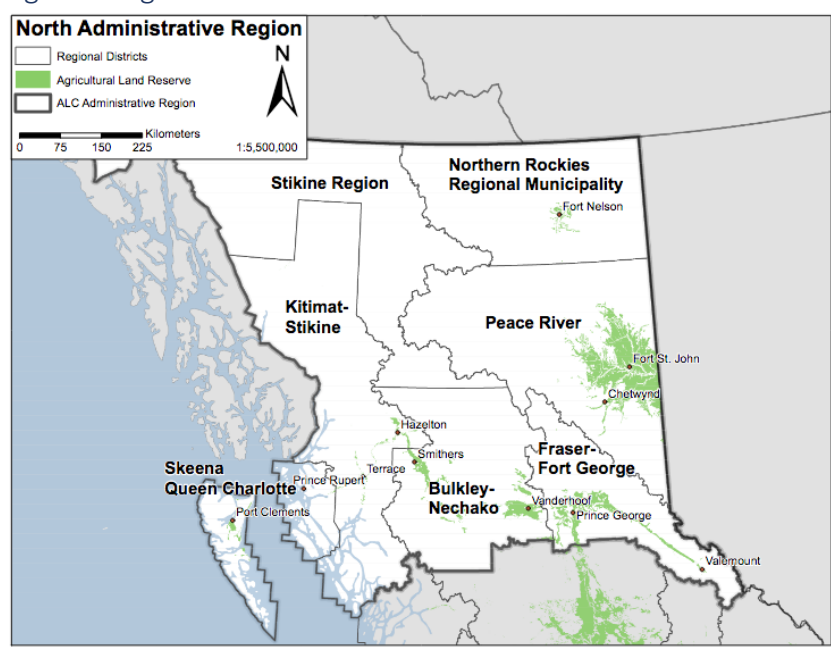
This section provides an overview of the agricultural land, production characteristics, and farm/farm operator data from the Robson Valley region. Agricultural Census data and other data sources are complemented with survey findings throughout this section.

3.1 Agricultural Land

In B.C.'s North region there are 2,210,783 hectares in the Agricultural Land Reserve (ALR), which makes up 49% of the provinces total ALR land (See Figure 2). In the Omineca (a large region which includes the RV) the total ALR area is 504,000 hectares and 43% of this land is classified as prime or marginal soils (Classes 1 through 4).³ More specifically, a search of soil class in the Robson Valley via the B.C. Soil Information Finder Tool (SIFT) shows concentrations of prime (Class 1-3) soil around Penny, from Dome Creek through to Crescent Spur, a thick swath from north of McBride through to Tete Jaune, and a small amount south of Valemount (Provincial Agricultural Land Commission, 2014). Agricultural capability in the Robson Valley is therefore considered high.

³ Agricultural capability classification in B.C., ALR. In B.C., agricultural land capability is classified into seven land capability classes (Classes 1 to 7). Class 1 land has minimal limitations when occurring within amenable climates, whereas Class 7 lands have limitations that impede agricultural production, regardless of the climate. However, Class 6 and 7 lands may still be agriculturally productive, where topography and climate allow, and where other limitations are overcome through infrastructure and improvements such as: drainage and irrigation, tillage, nutrient replenishment, pest management, or the use of closed environmental systems (such as greenhouses, or container growing) (Government of BC, 2018)

Figure 2: Agricultural Land Reserve



Source: Provincial Agricultural Land Commission, 2014

3.2 Robson Valley Production

The last Agricultural Census was completed in 2016, and the next census will occur in 2021⁴, with data becoming available in late 2022. The agricultural census captures information for Electoral Area H- Robson Valley/Canoe (Robson Valley). The 2016 agricultural census data indicates that cattle ranching is the most prominent production by primary farm type in the Robson Valley with 33 beef ranches and 5 dairies reporting. Other animal production is also very common including horse/equine and mixed animals. A small number of census producers grow vegetables commercially, and 31 farmers grow other crops (which consists of mostly hay farming: 25 farms). Within “hay” farms, hay and field crops primarily include alfalfa and alfalfa mixes, oats, barley, some spring wheat, some rye and other fodder crops. In 2016 there were 4 certified organic farms in the Robson Valley (RV) (Statistics Canada, 2016).

Because so many farmers are practicing mixed farming activities and record only their primary production type as Census “farm type”, the Census numbers by “farm type” may not adequately portray the diversity of production in the Valley. Table 2 includes a selection of interesting finer grain detail available within Census data for number of farms reporting production of a certain crop type or livestock type (not necessarily as their primary product) (Statistics Canada, 2016).

⁴ Collection for most farms will take place from May 3 to September 3, 2021. Collection will take place for large or complex farms from January 4 to September 3, 2021.

Table 2: Fine Grain Production Details (2016 sample)

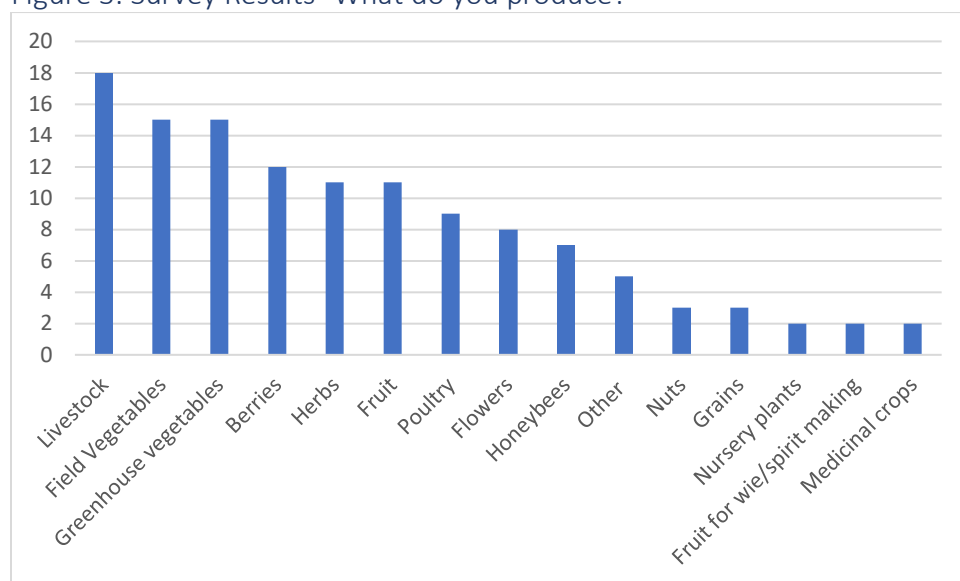
Production type	Number of farms reporting
Poultry	38
Bees	11
Pork	8
Sheep and lambs	7
Raspberries	5
Greenhouses	5
Other fruit berries and nuts	3
Strawberries	2
Apple	1
Blueberries	1
Saskatoons	1

Source: Statistics Canada, 2016.

In addition to the 2016 Census data, recent informal surveying in the Robson Valley by the CCFFG Robson Valley Agriculture Development and Regional Business Liaison provides additional detail on some crop types and mixed farming combinations in the Robson Valley. According to CF-FFG personal correspondence, Robson Valley production includes 3 U-harvest/U-pick operations, 1 grower of ancient grains, 5 farms producing grass fed beef, 2 raising grass fed lamb, 1 goat producer (for meat), baking, mushrooms, wild fruit and herbs, processed jams, syrups, juices, a few nursery stock and flower operations, a few garlic operations and quail eggs. There are also a number of mixed subsistence farmers that are interested in scaling up production and there is a strong history and interest in root crops and winter storage crops in the RV (Thorne, 2021).

The RVMOA survey asked respondents what they produce, providing the most current information on local production. Figure 3 shows what 36 respondents currently (March 2021) produce. Hay and forage production are believed to be captured under “livestock” and under “other”.

Figure 3: Survey Results -What do you produce?



Detailed responses on what type of crops/how many animals within the above categories reflect a large range in scale of production and a large diversity of crops.

Livestock included herds as small as 5 lambs and pigs to a 300 head herd of cattle, with everything in between.⁵ No responses were received from bison producers. Field vegetables were extremely varied, and included the most mentions of root crops (potatoes, carrots, beets), storage crops (onions), brassicas, beans, peas, zucchini/squash, tomatoes and garlic. The greenhouse vegetables category reflected what is typically grown in a greenhouse: tomatoes, peppers, cucumber, basil, and fewer mentions of: melons, eggplant, strawberries. Berries listed (in order of number of mentions) included: raspberry, strawberries, black currants, blueberries, saskatoon, blackberries, elderberries, haskaps, haslam, goji, gooseberries, currants, and high bush cranberries. Fruit listed (in order of number of mentions) included: cherry, apple, rhubarb, crabapple, pear and plum. Poultry included responses from as small as 10 chickens up to an operation with 50-100 meat birds and 20 layers⁶. In the “other” category, crops listed included mainly: field crops, grass feed and hay.

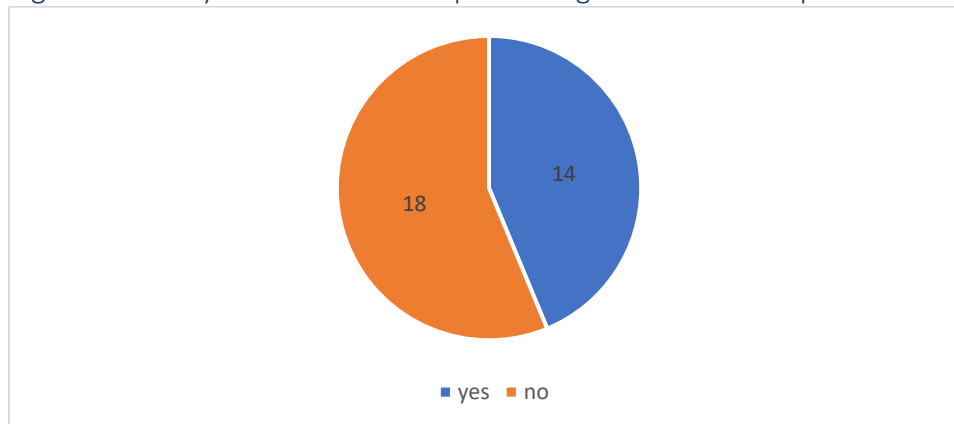
Related to processing or value-added activities, survey results show that slightly more than half of respondents engage in some form of value-added or processing activity (defined in the question as dehydrating, bottling, canning, yogurt or cheese-making etc.). However, at least 3 of the responses specify that this is only for personal consumption and it is unknown whether the remaining responses are referring to personal use or commercial production. Types of

⁵ Sheep (30 ewes, 11 goats); Lambs and pigs (5); 11 cows and a bull; 100 sheep. ; 20 beef. 20 pigs; Beef 15; beef 25; beef 11; beef 5); beef 300; 50 pigs

⁶ Chickens 10, ducks 6; 100 laying hens; laying hens; 30 layers; 50 head total; 50-100 meat, layers 20; Meat 100; 25 layers, 100 meat.

processing included in the comments were: dehydrating, canning, fermenting, butchering, freezing, cheese-making (personal). Results are shown in Figure 4.

Figure 4: Survey Results - On-farm processing or value-added products



3.3 Farm and farm operator characteristics

At the time of the 2016 Census of Agriculture there were 111 farms in the Robson Valley representing 22% of all of the farms in the Fraser Fort George Regional District in 2016 (total 492). This is a decrease from 121 at the time of the previous census (Statistics Canada, 2016). The average age of farmers in the RV in 2016 was 58, which is slightly higher than the B.C. and Fraser-Fort George region at the time (average of 56.3 and 56.7 respectively) (Statistics Canada, 2016).

Consistent with elsewhere in B.C., the Robson Valley consists of mostly smaller farms (in terms of gross farm receipts and acreage). In 2016, 46% of farms had total gross farm receipts of under \$10,000 per year (51 farms), another 20 farms earned between \$10,000 and \$24,999 per year. Another 25 farms earned between \$25,000 - \$99,999 and very few earned more than this (Appendix 4). By acreage, over half of the farms were under 240 acres, which is considered quite small by comparison to other parts of B.C., and to other parts of Canada (Census categories go up to 3,520 acres and over) (Statistics Canada, 2016).

Previous survey research indicates that within the Highway 16 corridor (Robson Valley to Terrace) there are a large number of producers working part- or full-time off the farm who would prefer to work full-time on the farm (B.C. Ministry of Agriculture, 2018). However, they are not able to produce at the price or volume required to sustain farm operations without off-farm income (Statistics Canada, 2016). Consistent with these 2018 findings, Figures 5 and 6 display RVMOA producer survey results related to part-time/ full-time farm work and farm businesses.

Figure 5: Survey Results- Do you work full-time or part-time on your farm?

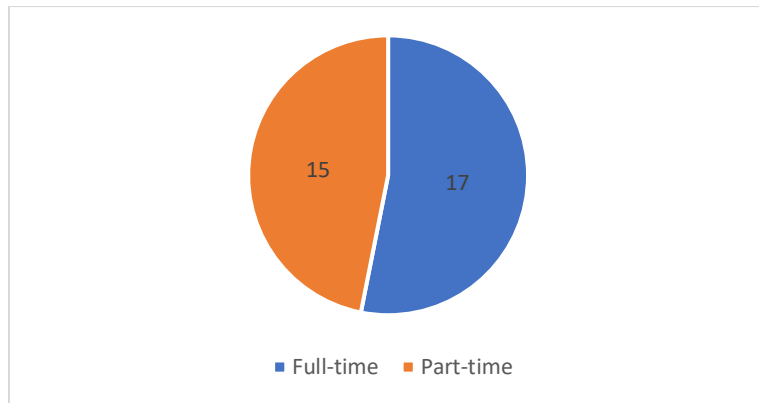
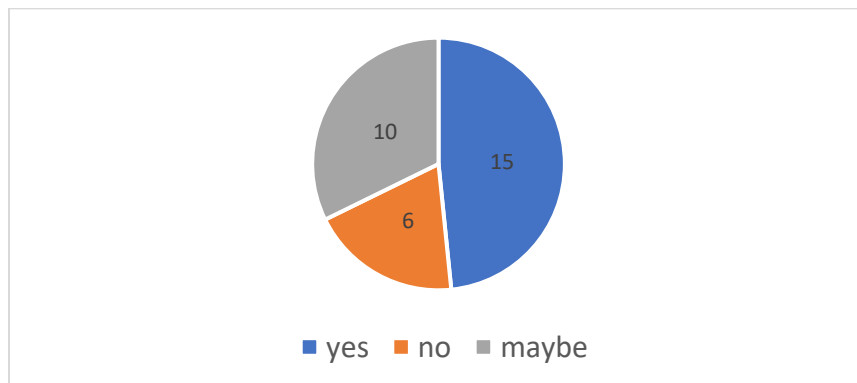


Figure 6: Survey Results. -Would you like to grow your business and devote more of your time to the farm and/or hire additional employees?



4.0 Production and processing challenges

4.1 Survey and Interview Results

When survey respondents were asked whether they could expand their farm operations on their current site (in terms of either production levels or area of production), 84% stated that they could (Figure 7). This indicates that land availability and geography are not the impediment for producers in the Robson Valley. When questioned further as to what the constraints are to increasing production, the most common responses were related to:

- Lack of investment capital (12 out of 33) *in particular equipment was noted
- Lack of storage or processing infrastructure (12 out of 33) *in particular lack of meat processing was noted
- Time (12 out of 33)

- Growing season/northern climate (11 out of 33)
- Lack of local market (11 out of 33)
- Lack of labour (10 out of 33) *accommodation for workers was specifically noted
- Lack of distribution/transportation infrastructure (9 out of 33)

It is worth noting that “age” was not an option provided on the survey, but 6 additional comments focused on age. See full results in Figure 8.

Figure 7: Survey Results -Could you increase production on your current site?

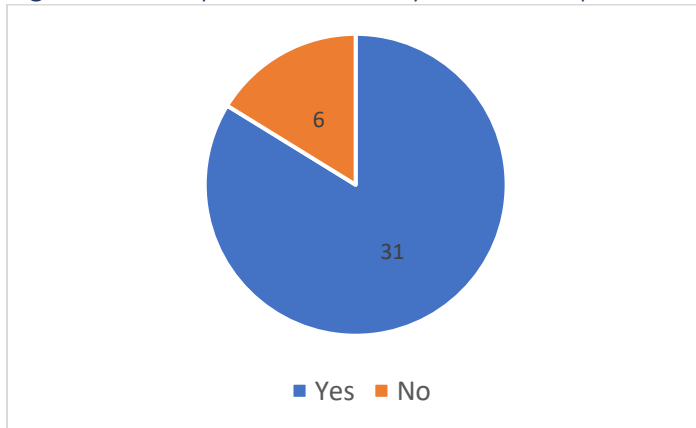
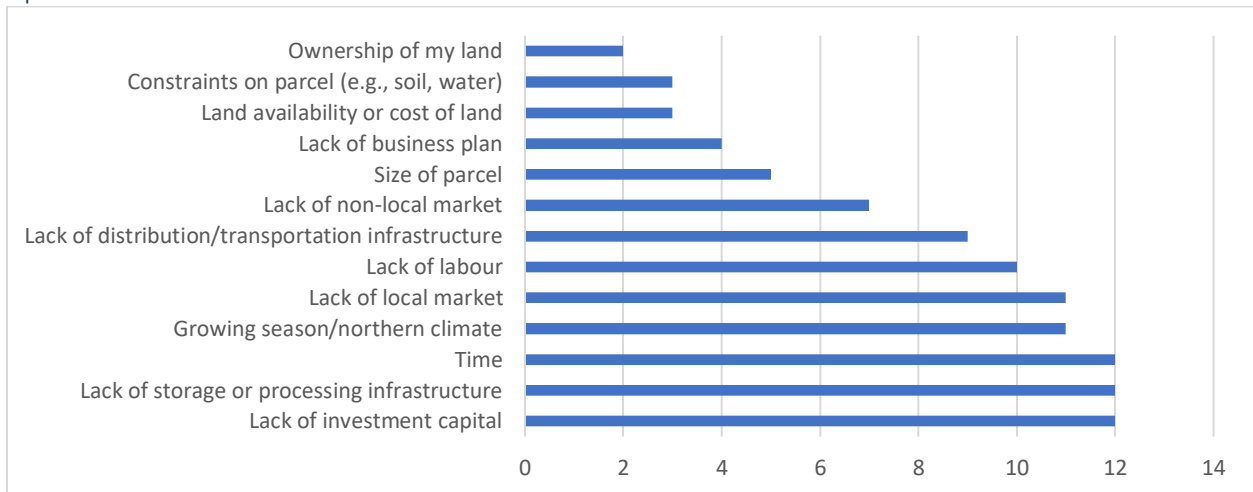


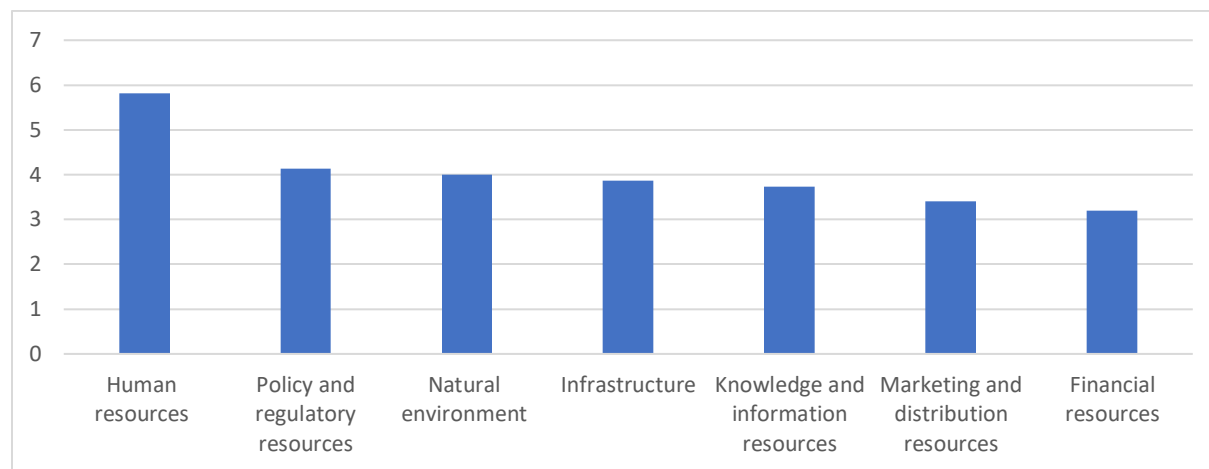
Figure 8: Survey Results - What are the major constraints or restrictions to expanding your farm operation?



Another survey question focused on the challenges facing the Robson Valley in general, beyond those of an individual’s constraints on their respective operation. When asked “what do you think are the top challenges affecting farming and food production in the Robson Valley? (Figure 9) , responses were quite evenly distributed across all categories, with a slight emphasis

on human resource challenges. Human resources were defined as including farm labour and associated issues (lack of labour, challenges associated with farm worker housing), lack of succession planning (age of farmers, no new young farmers⁷), lack of time and capacity for farm/ranching industry to work together to support each other. This echoes the emphases on age, labour and time described with respect to expanding one's own operation.

Figure 9: Survey Results – Top challenges of farming/food production in the Robson Valley



*Note: Graph is based on overall score from all rankings

⁷ Some survey responses indicate the perception that there are no new farmers, and 2016 Statistics Canada data indicates few young farmers. However, anecdotally, there are many new young “growers” who may not identify as “farmers”. When 2021 Census data is complete it may reveal a shifting trend.

SURVEY CATEGORIES

The survey described each category as follows:

Natural environment [e.g.: Remote location, Growing season length, mixed/complex soils in region, Climate change, water, Wildlife threats to livestock and crops]

Infrastructure [e.g., Internet connectivity Lack of supporting infrastructure (processing, abattoirs, cold storage, packing and grading facilities, distribution etc.)]

Knowledge and information [e.g., lack of extension, lack of local government resources and of trade associations and industry/commodity groups (located in south of province)]

Human resources [e.g., farm labour and associated issues (lack of labour, challenges associated with farm worker housing), lack of succession planning (age of farmers, smaller proportion of young farmers), lack of time and capacity for farm/ranching industry to work together to support each other]

Financial resources [e.g., limitations of crop insurance and other farm financial tools]

Policy and regulatory [e.g., understanding and meeting regulations (Water Sustainability Act, Food Safety Act), rules re: booths and staffing at Farmers Markets]

Marketing and distribution [e.g., lack of consumer awareness or support for product, lack of opportunities and support to sell locally, lack of information and support to sell out of region]

The key challenges for production in the Robson Valley, from the perspective of food system stakeholders from outside of the region and gathered through targeted interviews, concentrate around consistent and adequate volume of supply, climatic constraints (in particular challenges of a wet spring or a late fall season), and transportation costs. These challenges are not unique to Robson Valley producers and other northern/ more remote communities are also grappling with the same challenges.

4.2 Produce Production and Processing Challenges in B.C.

Vegetable and fruit production in B.C. is facing increasing competitiveness from other parts of Canada and internationally due to the high prices of land, and a combination of both lower prices and higher costs of production than the national average. The cost of production and price squeeze is exacerbated by the ease and availability of lower cost imports. Vegetable and fruit producers also face difficulties accessing advanced payment and risk management programs (Gooch et al, 2021).

These risks affect not just production, but other aspects of produce value chains. Reported increasing operational costs, inconsistent quality, inconsistent supply, and lack of industry cohesion/co-operation result in a two-fold financial risk. The inconsistency with quality and availability in the vegetable sector specifically is documented to increase transaction costs to the degree that customers' willingness to source B.C. vegetables decreases. This then reduces

the perceived value for B.C. vegetables, and thus reduces revenues received. Quality issues are noted to be particularly problematic with root vegetables and leafy greens grown in the Lower Mainland, Vancouver Island and other B.C. temperate rainforest environments (Gooch et al, 2021).

A comprehensive 2012 provincial report summarizes these combined challenges as being the “antithesis” to effective value chain management, and identifies the following four key issues.

- Lack of communication and information sharing along the value chain, including between members operating at the same level of the value chain.
- Lack of effective quality management practices and processes, particularly at farm level, and the immediate link along the value chain (e.g. storage, handling and logistics).
- Lack of focus towards meeting the end market (consumers) and customer needs.
- Lack of desire, motivation or ability to constructively act upon information that does exist (Gooch et al, 2021).

“A value chain is a strategic collaboration of organizations for the purpose of meeting specific market objective over the long term and for the mutual benefit of all links of the chain. Value chains build collaborative management structures as well as information systems that enable each link in the chain to work together to better respond to customer demands and market changes.”

(Growing Alberta – Agriculture and Food Council, 1998)

4.3 Meat Production and Processing Challenges in B.C.

The most important issue facing meat producers across B.C. generally is access to slaughter infrastructure. In many locations, including the Robson Valley, there is insufficient infrastructure and there are limitations to the infrastructure that does exist. Red meat abattoirs often struggle to survive due to issues with attracting skilled labour (because of the seasonal nature of the work and low pay) and with maintaining a profitable business year-round, when slaughter demand peaks only in fall and early winter (Select Standing Committee on Agriculture, Fish and Food, 2019). These challenges are not nearly as pronounced for poultry in B.C due to a shorter broiler production cycle and therefore more evenly distributed processing demand throughout the year.

Larger grocery retailers (i.e. inter provincial) require their meat products to be processed by a federally licensed plant. This includes the Jasper/Lake Louise corridor. Provincial retailers can purchase product from provincially licensed Class A or B abattoirs. As there are currently only provincially licensed red meat plants operating within B.C., this limits access to some segments of the retail sector for B.C. produced and processed meat (Gunner and Watt, 2012).

Class A facilities can slaughter, cut and wrap for retail within B.C. or direct to consumer and the number of animals is unlimited. Class B facilities are similar but can slaughter only. There is 1 Class A slaughter facility in Prince George (Government of British Columbia, 2021). Many issues have been raised by small-scale producers regarding Class A and B facilities, including lack of access to these limited facilities due to geography, that these facilities sometimes do not have the time to slaughter their animals, some facilities do not want to deal with smaller-scale producers, and how the slaughter is not completed as specified by the smaller-scale producer (Select Standing Committee on Agriculture, Fish and Food, 2019). The Class A and B facilities also have challenges in working with small-scale producers. Reported challenges include scheduling conflicts, inconsistent communication, orders taking up storage space and not being picked up when scheduled, and livestock not being delivered on time (Select Standing Committee on Agriculture, Fish and Food, 2019).

When it comes to Class D and E regionally inspected facilities, these facilities are highly limited in the services that they can provide and where they can sell. The Class D licence allows on-farm slaughter of 1-25 animal units annually for direct sale to consumers or retail sales to secondary food establishments (e.g. restaurants and meat shops) within the boundaries of the region where the meat was produced. Class D licensees may slaughter their own, or other peoples' animals. Class D licences are available in 10 provincially designated regions, included Fraser-Fort George Electoral Area H (Government of British Columbia, 2021).

The Class E licence allows on-farm slaughter of 1-10 animal units annually for direct sale to consumers. Sales are restricted to the region in which the meat was produced, and operators are only permitted to slaughter their own animals. Class E licences are only available when other slaughter services are not available to the producer. The policies and regulations for Class D and E facilities are currently under review by the Provincial government (Select Standing Committee on Agriculture, Fish and Food, 2019).

Other major challenges to the industry are the environmental impacts and natural disaster impacts on pasture and forage. As un-irrigated crops, or unmanaged land, this livestock feed is highly vulnerable to wildfire, drought and pest damage. As was experienced in B.C during recent wildfire seasons, importing hay from elsewhere within the province or across provincial borders when local supply is affected is price prohibitive and often not an option. (Charlton, 2018). Increasing hay production not only enables ranchers to increase their herd size, it also serves as an insurance policy against unexpected environmental impacts and climate change. (Charlton, 2018).

In previous work to promote and develop beef value chains in B.C., the following challenges were identified:

- Offering competitive order and delivery systems to buyers
- Encouraging chefs to use dynamic menus
- Positioning and defining various production practices with consumer values (grass-fed, natural)

- Setting standards for quality factors such as breed, feed and finishing
- Familiarizing ranchers with new marketing tools and strategies
- Balancing seasonal demand on local processors
- Demonstrating the business case for direct sale versus commodity sales (Merrick, 2014)

WHAT ARE VALUE CHAINS?

For most products, they are **pushed** towards ends user. The product is produced and/or processed and then sold. In value chains, the intention is that the product is **pulled** through the food system by the end consumer or purchaser. This requires collaboration with the end purchaser, and each component of the food system leading to them, before determining what the product will be. A 2019 Value Chain Coordination Study lists the following steps in value chain establishment.

1. Identification of an opportunity or challenge—typically the product is operator-driven and/or customer-focused;
2. Sourcing of appropriate partners and capabilities;
3. Provision of a platform for producers/processors to obtain funding for development of product solutions; and
4. Design and implementation of the product solution.

It is important to note that the very first step is to prove demand for a product (FS Strategy Inc., 2019).

4.4 Summary of Challenges

The challenges which emerged in the survey and interviews (Section 4.1) mirror the challenges experienced by producers in other parts of Northern B.C., and across B.C. in general, as documented from the background research (Sections 4.2 and 4.3). This section summarizes challenges gathered from all data sources, and organizes challenges by the seven survey categories.

“One of the reasons that many small farms and agribusiness firms in farming dependent areas find themselves with inadequate resources to realize economies of size is that they rely on family capital rather than on public equity or venture capital, which is more available in more populous locations.” (Tweeten and Flora, 2001)

Table 3: Summary of Challenges

Category	Challenge
Natural environment challenges	<i>Land:</i> Access to small plots of land for new entrants
	<i>Climate:</i> Growing season length and climate
	<i>Climate:</i> Managing rain and moisture (especially a wet spring or wet fall/ a short season)
	<i>Climate:</i> un-irrigated crops, or unmanaged land, leaves livestock feed is highly vulnerable to wildfire, drought and pest damage
	<i>Water:</i> anecdotally drought is becoming a problem, and climate change projections show that warmer summers should be anticipated (Charlton, 2018).
	<i>Water:</i> Hay crops not thriving because of lack of water/lack of irrigation. ⁸ Producers require better information to manage this.
	<i>Soil:</i> Soil type variation adds to management complexity. ⁹
Infrastructure challenges	Internet connectivity ¹⁰
	Meat processing facilities (access to Class A and B, limitations of Class D and E)
	Packing/ packaging facilities (co-operatives, co-packing options, cold storage, warehouses)
	No weather station for local weather data
Knowledge/information resource challenges	<i>Research:</i> Access to relevant research
	<i>Research:</i> Support for producer trials
	<i>Extension:</i> Extension officers and access to extension
	<i>Extension:</i> Provincial commodity/industry associations are missing for some crops/production types
	Research and Extension: Government resources are concentrated in the southern part of province
	Consumer education (chefs, consumer)
	Familiarizing ranchers with new marketing tools and strategies

⁸ In the 2016 Agriculture Census only 22 farms and 456 acres were irrigated in the RV (out of 111 farms and 55, 809 acres total) compared to 61 farms and 2,097 in the whole RD (492 farms and 229,055 acres) (Statistics Canada, 2016).

⁹ Anecdotally, the soils in the RV vary a lot on a given site because of glacial style through which soils formed. Fields are not either wet, or dry, but have varying bands of soil types throughout a single field (Charlton, 2018).

¹⁰ Rural broadband was an issue before COVID, and COVID has only exacerbated this. The pandemic could also be used as a leveraging tool to encourage governments and funders to support rural broadband.

Category	Challenge
	Communication along the value chain
Human/social resources challenges	<i>Labour:</i> High cost and lack of availability of skilled farm labour
	<i>Labour:</i> Farm worker housing
	<i>Labour:</i> High ratio of only part-time farmers
	<i>Succession:</i> Aging producers and succession planning
	<i>Succession:</i> Lack of mentorship
	<i>Succession:</i> Not enough new/young farmers
	<i>Human/social capital:</i> Limited capacity of Farmer's Institutes
	<i>Human/social capital:</i> Provincial commodity/industry associations are concentrated in the southern part of the province
	<i>Human/social capital:</i> Small number of local Ministry of Agriculture staff (closest Regional Agrologist is in Vanderhoof)
Financial challenges	<i>Cost of production:</i> Small economies of scale
	<i>Financial instruments:</i> Access to financing and lack of capital funding
	<i>Financial instruments:</i> No local Farm Credit Canada office and less options for financial institutions
	<i>Cost of production:</i> High operating and production costs of small-medium sized farming and small-scale manufacturing.
	<i>Cost of production:</i> Cost of land
	<i>Cost of production:</i> Low profit margins
	<i>Cost of production:</i> Competition from cheap imports
	<i>Risk Management:</i> Limitations of crop insurance
	Leased land which inhibits infrastructure investment and capital improvements and innovation. ¹¹
Policy and Regulatory challenges	Ensuring grazing licenses and access for locals
	Support to understand various regulatory process (e.g. Water Act licenses and processes)
	Access to quota (poultry, eggs and dairy)

¹¹ This is common in B.C. In the RV only 33,931 acres are owned out of 55,809 acres reporting (Statistics Canada, 2016).

Category	Challenge
	Policies/regulations designed for large-scale farms are difficult for small-scale farms to meet ¹²
Marketing and distribution challenges	<i>Quantity:</i> Challenges meeting the volumes required by wholesalers/distributors.
	<i>Costs:</i> High cost of labelling/packaging, meeting bar code requirements, transport/shipping, and marketing products
	<i>Costs:</i> Direct marketing costs include negotiating, signing and administering contracts, bargaining over prices and other terms of sale.
	<i>Costs:</i> Indirect marketing costs accrue from inefficiencies coordinating the direct costs.
	<i>Transportation:</i> Inaccessibility and high cost of transport/shipping (exacerbated by the fact that the products with the best transportation life are also the heaviest and of lowest value)
	<i>Transportation:</i> Remote location and distribution logistics
	Lack of competitive order and delivery systems
	Lack of technology base, market skills and funds necessary to successfully market products.
	<i>Time:</i> Little time for marketing due to the demands of growing and/or processing.
	<i>Infrastructure:</i> Access to product testing and quality control facilities or money to buy equipment.
	Lack of non-local market
	<i>Visibility:</i> Studies show that while residents praise their variety and quality, B.C. products are not always available or easy to find (Advanis, 2018).
	<i>Quality:</i> Quality management processes. Studies also show that B.C. products are also perceived to not always offer the best value for money (Advanis, 2018).
	Access to direct sale of meat to consumers or retail sales to secondary food establishments out of region
	Access to larger retailers that require federal meat inspection
	Positioning and defining various production practices with consumer values (grass-fed, natural)
	Demonstrating the business case for direct sale versus commodity sales

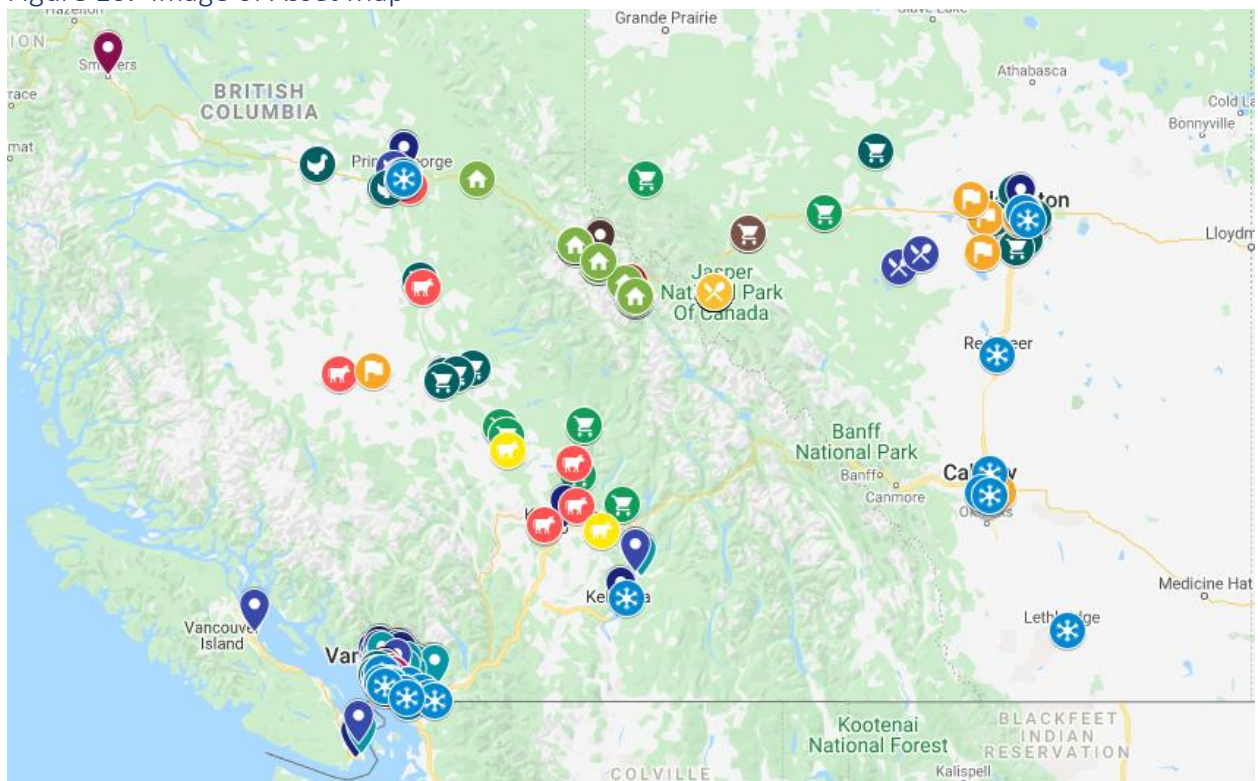
¹² A partial list of such regulations is: Complying with regulations designed for large-scale inventory control; The Food Safety Act and Regulations (especially the Meat Regulation); Milk Safety Act and Regulations were mentioned as barriers to the development of dairy products such as cheese and ice cream.; The Water Sustainability Act is particularly onerous for small producers because of the fees required; The rules governing staffing booths at Farmers Markets.

5.0 Production and Processing Assets

5.1 Methodology

Documenting the production and processing assets in the Robson Valley was completed through a combination of a literature review, development of a visual asset map, survey questions and targeted interviews. See Appendix 5 for a description of the Asset Map development methodology. Full asset map available at: <https://tinyurl.com/28xm8tv2>. See snapshot of the asset map from May 10, 2021 in Figure 10.

Figure 10: Image of Asset Map



5.2 Asset Map

The asset map includes agricultural support services or markets that can be visually and geographically represented. Table 4 describes what is captured in the asset map. Other assets that are not location based are discussed in Section 5.3 Summary of Robson Valley Agricultural Strengths.

Table 4: Description of Asset Map

Asset Category	Description of Map Layer
Regional Food Retail	Butchers, all sizes of grocery stores, Farmers Markets and specialty grocery stores from Prince George to Salmon Arm to Edmonton (along the Hwy 16 and Hwy 97).
Distributors	Distributors and processors across B.C., including the lower mainland, and in Western Alberta, and registered agency/marketing groups ¹³ .
Processing and distribution (Butcher/packer, Abattoir Class A, Abattoir Class B)	This layer includes assets from Prince George in the North, Redstone in the West, Pritchard in the South and Calgary/Edmonton in the east. Retail (storefront) butchers are listed in the Regional Food Retail layer. Butcher/Packers- doing larger scale processing, are listed on this layer. Class C and D are on private farms and are not publicly listed.
Lower Mainland food retail	A selection of provincial chain grocery stores (e.g. Fresh St, Nesters), who are known for carrying local product, and organic specialty grocery stores (Choices, Whole Foods) in the Vancouver area.
Regional foodservice	An unfiltered short list of restaurants, cafes and caterers from Prince George to Valemount and east to Edmonton. ¹⁴
Regional Agricultural Suppliers	This layer has been restricted to suppliers likely to be utilized or relied upon by producers in the Robson Valley. Geographically focused on the Valley through to Prince George, with a few Vanderhoof businesses.
Cold storage and transportation	The asset map shows 48 cold storage and/or transportation companies located across B.C., with the closest location in Prince George. See following page for further description.
Robson Valley Farms	This layer only shows farms that have chosen to be publicly listed in the Robson Valley Agricultural Guide. ¹⁵

¹³ These are producer agencies that are licensed by the BC Vegetable Marketing Commission (BCVMC) to market a regulated storage, processing or greenhouse vegetable to a Wholesaler, Retailer, Food Service Company, or Processor. For more on the BCVMC see section 6.1.

¹⁴ This layer was left only partially developed, as these companies are not assets unless they have the willingness to purchase local ingredients. Additional foodservice locations should be added based on their interest in sourcing local products.

¹⁵ With producer approval and further development, this layer could ultimately serve as a map to local food, or a map to connect potential buyers with farm product.

Cold Storage and Transportation

Many of the 48 companies listed in the Asset Map are able to service the Robson Valley. Upon reviewing various company's websites, three stood out as potential assets for Robson Valley producers.

- 1) Canadian Dry Storage Ltd. offers "less than truckload" (LTL) services. This freight service enables customers to ship the exact quantities they want, at an appropriate cost. LTL shipments are loaded onto trucks and trailers with other orders and delivered on regular delivery routes (Canadian Dry Storage Ltd., 2020).
- 2) Subzero Cold Logistics also states that they cater to individual growers and independents. Their website states that they provide services to all types of growers, importers and exporters and that they are able to pick up from farms, store and inventory goods and ship fresh and frozen products anywhere (SubZero Cold Logistics, 2018).
- 3) Clark Freightways points of service lists: Dunster, McBride, Valemount, Tete Jaune Cache (Clark Freightways, 2021).

It is important to note that while freight companies are offering this service, the costs may be prohibitive, and combining product with product from another company/farm is unlikely to meet Hazard Analysis and Critical Control Points (HACCP) food safety requirements.

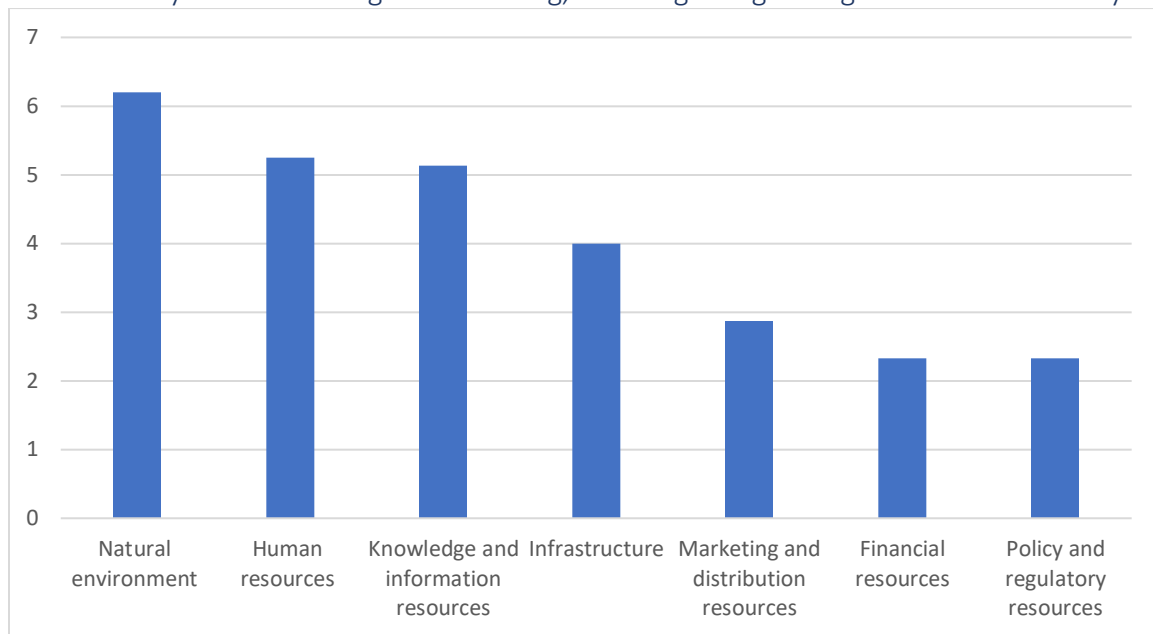
5.3 Summary of Robson Valley Agricultural Strengths

In addition to physical assets that have been mapped, the following non-geographic assets reflect a combination of survey results, targeted interview results, results from a Regional Climate Adaptation Strategy workshops in 2018 and assets drawn from other recent local reports.

Survey Results

When asked about the top strengths affecting farming and food production in the Robson Valley region the three top ranked categories were: natural environment, human resources, and knowledge and information resources. The people and the location are the backbone of farming in the Robson Valley. The three lowest ranked categories are: marketing and distribution resources, financial resource and policy and regulatory resources/supports (Figure 11).

Figure 11: Survey Results -Strengths of farming, ranching and growing in the Robson Valley



*Note: Graph is based on overall score from all rankings across 16 responses

Summary

Table 5 summarizes the strengths of food and farming in the Robson Valley from the background review, interview data, survey data and asset map.

Table 5: Summary of Strengths

Category	Strengths
<i>Natural environment</i>	High agricultural capability in region (Class 1 - 3 land)
	Producer-stated opportunities to expand
	Low land costs
	Affordable forage and good forage. Possible to do grass-finished beef.
	Un-used farmland
<i>Human and social</i>	Nimble, small producers who can change and innovate quickly
	Producer associations with local presence (e.g. young Agrarians Central and interior Land Matcher)
	McBride Farmers Institute
	Neighbours and networks
	Locally organized wildfire response

Category	Strengths
<i>Knowledge and information</i>	Robson Valley Growers Cooperative ¹⁶
	Robson Valley Community Services
	Long-time farmers with extensive knowledge
	Workshops /seminars
	Virtual resources
	Local communications networks
<i>Infrastructure /inputs</i>	McBride Open Gate Garden
	Community halls for gathering
	Soil amendments in region
<i>Marketing and distribution</i>	Regional agricultural inputs (see Asset Map)
	Local Farmers Markets
	Population interested in food security
	Regional foodservice (see Asset Map)
<i>Financial</i>	Regional food retail (see Asset Map)
	Crop insurance
	Various support programs (however grants writers or professionals are required to access many)
	Banks have options for agriculture sector
<i>Policy, programs and regulatory</i>	Regional District of Fraser-Fort George
	Agricultural land Use Steering Committee
	Community Futures of Fraser-Fort George
	Farm Business support
	Buy B.C.
	Agricultural Land Reserve
	Environmental Farm Plan
	B.C. School Fruit & Vegetable Nutritional Program (accessed by schools in Valemound and McBride) ¹⁷

¹⁶ This Cooperative was formed in 2009 by farmers, ranchers, and gardeners from Dunster, McBride, and Valemound. These producers have already identified and worked together to take advantage new market opportunities, including a significant presence in Jasper at the Jasper Farmers' Market.

¹⁷ for 8 years they provided \$ for fridges and the schools receive fresh B.C. fruit in season (or from further afield if nothing seasonal available) once a month by courier from Prince George. In 2019/2020 they also received non-perishable food from Save On Foods as part of a school breakfast and lunch initiative.

6.0 Agri Food Market System

6.1 Regulated Production

Canadian agricultural production of broiler hatching eggs, chicken, table eggs, milk, and turkey is regulated through the supply management system to ensure that supply matches demand, that producers receive a fair return, and that consumers are assured a safe and continuous supply of quality product.

Cranberries, hogs and vegetables are regulated but are not supply managed (Government of British Columbia, 2021).

Supply Management

The amount of production of each supply-managed commodity produced in Canada is controlled through a quota system. Federal agencies establish national market needs and then allocate quota to each of the provinces. Various provincial marketing boards then manage production, overseen by the B.C. Farm Industry Review board, and following various Regulations, by issuing quota to producers. Quota defines producer's ability (and obligation) to produce a specific quantity of product within a set time period (Government of British Columbia, 2021).

Dairy

The British Columbia Milk Marketing Board (BCMB) has the authority to promote, control and regulate the production, transportation, packing, storing and marketing of milk, and milk products within B.C. This includes managing the allotment of quota to licensed producers. Avenues to obtain milk quota in B.C. are via the BCMMB new entrant program, or by purchasing quota on the quota exchange (BCMMB, 2021).

Poultry (Chicken)

Chicken quota is overseen by the B.C. Chicken Marketing Board. Individual or farms may grow up to 200 chickens per year for personal use. Through a permit program, British Columbia residents can apply to grow up to 2,000 chickens per year for farm direct marketing. Above this amount is considered commercial production and requires quota. Some quota is reserved for new entrants based on market and regional needs. However, a review on May 28, 2021 showed waiting lists were closed. Two ways to buy quota are through buying an existing farm with its quota attached, or buying quota from a farmer (BCCMB, 2016).

Poultry (eggs)

Distribution of provincial egg quota is determined by the B.C. Egg Marketing Board with B.C. Farm Industry Review Board prior approval to vary quotas.

No quota or registration is required for backyard flock producers with between 1-99 hens. Farmers with 100-399 hens are considered small lot producers, and do not require quota, but need to register through the small lot program. Producers with over 400 hens require quota from the BCEMB. Quota can be purchased through the quota exchange or through a farm sale, or by winning the BCEMB New Producer Program draw.

In 2020 the decision was to place growth quota units into a reserve and only issue this quota when there is sufficient total quota available to provide 150 layers. This decision shows how limited new quota is in the province (BCFIRB, 2020).

Other Regulated Production

Hogs

The B.C. Hog Marketing Commission (BCHMC) regulates farms producing on a commercial scale, not small lot producers. It does not regulate the amount of production, but it has the power to regulate transportation and marketing, and to determine the manner of distribution, the quantity and quality, and the grade or class of the regulated product (BCHMC, no year).

Produce

The B.C. Vegetable Marketing Commission regulates certain storage and greenhouse vegetables in B.C. south of the 53rd parallel north, including Vancouver Island and the Gulf Islands and excluding the Queen Charlotte Islands. A B.C. grown vegetable becomes regulated if “over 70% of producers representing at least 70% of the tonnage produced or acreage planted of that vegetable vote in favor of regulation, and the Commission issues an order that the vegetable is to be regulated” (BCVMB, 2020). See Appendix 6 for a list of all regulated crops.

All regulated vegetables must be procured through a licensed Designated Agency or Producer-Shipper. Only licensed Agencies or Producer-Shippers can market regulated products to a wholesaler, retailer, food service company, or processor. A list of wholesalers and agencies who are licensed to market the vegetables are listed on the BCVMC website (BCVMB, 2020).

The Commission designates agencies, which allows producers to organize into marketing groups (BCVMB, 2020). Agencies are meant to provide producers with the ability to organize themselves to maximize the opportunities and investment options which would not be available to individual producers, smaller producers, or to commodity groups (BCVMB, 2020). The intention is that these marketing groups have the critical mass to compete against regional competitors.

For storage crop production, if a producer is a fairly small-scale operation (e.g. operating a small farm stand or growing farmer’s market quantities and is not looking to sell direct

to retail/wholesale/food service), they do not require Agency representation to market their product, and can become licensed for a small fee (Babcock, 2021).

To become a licensed Producer-Shipper is much more involved because in this case the applicant basically operating as a smaller-scale Designated Agency. Producer-Shippers may sell direct to retail/wholesale/food service under their own marketing brand but must adhere to certain licensing requirements (Babcock, 2021).

To become a designated agency the proponent must send a letter to the BCVMB accompanied by a thorough company background, a detailed business/marketing plan, company financials, and market projections (Babcock, 2021). This process enables avoiding too many designated agencies in the province as each agency needs to have critical mass to be competitive.

6.2 Direct Sales

Direct sales include any type of transaction where the end customer pays the farmer directly for product without a middle person. In the case of small-scale produce, because the product is not processed, may not be graded, and is not distributed nor sold by a third party, certain licenses are not required, and certain regulations do not apply, making this form of sales the most accessible. Forms of direct sales include: Community Supported Agriculture (CSA) or other forms of subscription box, U-pick operations, farm gate (via either a farm stand or a more developed farm retail outlet) and Farmers Markets.

The information in the rest of Section 6 is an integration of RVMOA survey and interview data, Census data, the *Industry Consultation and Findings report* from the *Supporting Northern B.C.'s Agriculture Producers and Food/Beverage Processors* project (B.C. Ministry of Agriculture, 2018) and the Beyond the Market (BTM) report . While the Northern B.C. project covered a larger geographic area than the scope of this project (from the Robson Valley through to Terrace), the work was completed quite recently and provides in-depth information on where producers are marketing their meat, produce and value-added goods, and what the benefits and limitations are of these existing channels.

Direct Sales Census Data

Census of Agriculture data for 2016 indicates that of 25 Robson Valley producers who reported direct sales, 19 of them reported using farm gate sales, stands, kiosks, U-pick and 8 reported using Farmers Markets (see Table 6) (Statistics Canada, 2016). Survey results from this project (2021) indicate that the most popular form of sales are still Farmers Markets, home delivery, box programs and “other”. “Other” is assumed to include live auctions, marketing boards, trading, animal shares and email listservs (see Section 6.6).

Table 6: 2016 Robson Valley Direct Sales

	Fraser-Fort George, British Columbia	Fraser-Fort George H, British Columbia
<i>All farms reporting</i>	130	25
Farms reporting unprocessed agricultural products sold	124	23
Farms reporting value-added products sold	15	4
Farms reporting using farm gate sales, stands, kiosks, U-pick	111	19
Farms reporting using Farmers Markets	27	8
Farms reporting using Community Supported Agriculture (CSA)	5	1
Farms reporting using other methods	9	1

Source: Statistics Canada, 2016

In the BTM report the majority of producers were selling almost exclusively through Farmers Markets, and a small number were also selling through a subscription box program or directly to restaurants (Gunner and Watt, 2012).

Meat and Poultry

At the time of Northern B.C. project, meat was being sold directly to livestock auctions, directly to consumers, through Farmers Markets and to local restaurants (B.C. Ministry of Agriculture, 2018). Other than restaurant sales, this is fairly consistent with the RVMOA survey results if “other” is assumed to include livestock auctions.

Produce and Value Added

Producers surveyed in the *Supporting Northern B.C.’s Agriculture Producers and Food/Beverage Processors* project were selling value-added products at Farmers Markets and at the farm gate and were selling produce at Farmers Markets, farm gate, U-pick, in produce boxes and via bulk sales (B.C. Ministry of Agriculture, 2018).

Direct to consumers

Consumers of local/small-scale meat from Northern B.C. generally live in larger urban areas: Vancouver, Fraser Valley, Kamloops, and the Okanagan. Producers who engage in direct sales usually create a website as their primary marketing tool. This is often done by several producers banding together as a small group. Direct to consumer marketing/sales requires investing a lot of time with the consumer, comfort with technology and a good transportation system. For meat sales, it also requires access to a butcher who can do custom cuts. Direct to consumer sales is appropriate for small producers who invest in their brand and customer relations. Price

fetches is high, but the margins may not validate the large time/cost investment that is required for success (B.C. Ministry of Agriculture, 2018).

Produce boxes/ farm shares/ animal shares

Producers who sell produce boxes almost always also sell at a Farmers Market, and many report signing up produce box customers at FMs. The main advantage is that subscription boxes create predictable and consistent income for the farm and pre-season orders can inform planting, minimizing the amount of waste. The main challenges are the time and logistics to prepare deliveries, and the labour required. Farm labour shortages and the cost of labour are significant. Another challenge is that low crop yields or crop failure could ruin a producer box program or upset customers (B.C. Ministry of Agriculture, 2018). The need to balance costs and revenue can be a limitation. An increasingly popular model to mitigate challenges and risks with a box program is for farmers to run a box program as a collective, or for one farmer to contract certain crops out to other farmers for their box program (crop contracting can apply to their Farmers Market diversity also) (Charlton, 2021).

Farmers may also sell whole animal shares directly to consumers. Customers expect a substantial discount if purchasing a whole, or half, animal. This is not lucrative for the farmer if they have limited supply and can sell the animal in separate cuts at a retail price. It also requires very strong communication and customer relation skills (Banwell, 2021).

Farm gate and U-pick

Produce and value-added producers almost always do farm gate and U-pick sales in addition to Farmers Market sales. Key challenges with this sales approach are marketing, theft and damage. A key advantage of farm gate and U-pick sales is that producers do not have to travel to sell their products. For some, the fact that they do not have to spend time preparing for travelling to Farmers Markets far outweighs the challenges. Another advantage is consumer education; consumers see and/or learn directly about the farm and farming as they are making their purchase. This is not an option for all farms, as access to the farm could be a limitation for some farms. The farm location would almost have to be chosen strategically in advance with this market option in mind (B.C. Ministry of Agriculture, 2018).

Farmers Markets

For most, the Farmers Market was the primary source of income of producers surveyed in the Northern B.C. report. Generally speaking, producers attended Farmers Markets within an 80 to 100 kilometre distance of their farm. Many indicated that some market customers also purchased products at the farm gate. For meat sales, poultry is more often sold at Farmers Markets across B.C. than lamb or beef. Producers selling at Farmers Markets benefit from customer loyalty, the fact that the market does all of the promotion and the market manages the number of vendors (supply) to try to help farmers sell out each time. Despite these advantages, there are multiple drawbacks. It is very time consuming to prepare and attend Farmers Markets. (Some farms mitigated this by taking pre-paid pre-orders and providing once monthly or bi-monthly pick-ups during COVID to substitute for in-person markets).

Produce vendors face the additional challenge that certain types of unsold produce is disposed of at the end of the market. This depends on the condition of the produce at the end of the Market (not the case with meat as it is usually sold frozen) and depends on the availability of secondary sale options for the farmer. Another challenge is the rule (at many Markets in B.C.) that to sell at a Farmers Market you must make, bake, or grow the product yourself. However, growing the crop conflicts with being at the market since Farmers Markets occur during the growing season. This rule also prevents farmers from hiring cheaper student/intern labour, and can prevent farmers from selling as a group of farms. However, this barrier can be circumvented through the use of co-operatives or collectives at some markets.

Customers often have expectations of lower costs when purchasing directly from the farmers, and many producers indicated that they felt that Northern B.C. consumers were not ready, willing, or able to pay the true cost of locally produced food. However, there is some evidence to the contrary (see information in Section 7.4, Table 14 on this potential market segment in the North, and Section 7.3 on the beef consumer segment).

Direct to (small) Retail

Some producers will also sell directly to smaller retailers, bypassing wholesale and distribution companies. This is likely only an option for smaller/local markets and not medium (provincial), national or international chains. This is also crop dependant, as many crops are regulated by the BCVMC if they are sold into any form of retail, wholesale and processing. BCVMC regulations aside, to bypass distribution companies, producers need a differentiated, niche product. They will usually need to work through the store's head office, and spend a substantial amount of time to find the right buyer as there is much competition (Charlton, 2021). However, even when selling directly to retailers, the food safety and Universal Product Code (UPC) requirements are the same as with distributors. Meeting retailers' product planning cycles can create a challenge and the retailer will add a 35-40% margin (Government of British Columbia).

One interviewee works directly with Save-On Foods produce buyers. He noted that individual stores, or specific regions (e.g. Save-On Foods in the Interior) might have more flexibility with what they stock (Bodnar, 2021). However, growers need to know what's required to access those markets. Co-ops or other collective arrangements were frequently referenced through the targeted interviews as a way to meet supply demands for larger buyers while also collaborating to meet quality, packing and food safety requirements.

Georgia Main Food Group, a provincial-level retailer consisting of 30 stores and two brands, sources product that can supply their whole chain in order to achieve quality control and consistency across their brand. Product comes to a central warehouse and is then distributed to each store. A representative of Georgia Main noted that if there is a farmer that excels at a niche product (e.g. really good heirloom tomatoes, or English peas), then they would look for opportunities to bring it to all of their stores (Usher, 2021). Within this small chain, and other small chains, there are individual stores that have deals with local farmers. These are generally farmers who have a niche product or who had an existing relationship with the store before it became part of the larger chain (Usher, 2021).

Targeted interviews revealed potential opportunities among local retailers to carry more Robson Valley product. Retailers indicated an interest in carrying local produce, if they do not already have a local source of a specific vegetable. Interest was also expressed in carrying local grain, more “shelf stable” vegetables (like broccoli or root vegetable as opposed to leafy greens) and a consistent source of local honey. Multiple local businesses have expressed interest in becoming some sort of community food hub, and others may be quite interested in additional local procurement, but could not be reached for comment. A full description of local retailers, the products they currently carry, and their criteria/process for local procurement can be found in Appendix 7.

Online sales/ E-Commerce

Two main challenges for developing an e-commerce platform and managing online sales are the capacity of small-scale producers and processors for handling Information Technology (IT) applications and also connectivity issues in rural areas (B.C. Ministry of Agriculture, 2018). There are also a lot of fairly new software/apps available, since e-commerce is growing quickly, and there can be difficulties with setting up platforms or finding the appropriate platform for farm products that meet farmer’s needs. Time and labour during the set-up of a system is costly. Ensuring extremely accurate inventory management and tracking, needed for effective online sales, is another challenge. “At a Farmers Market it’s clear when you sell out, and you can just sell something else, but this isn’t possible when you have all pre-orders” (Banwell, 2021). With an on-line store, diversity is important for produce growers. At Farmers Market a consumer can just purchase different items from the next farmer. With an online store diversity is necessary for the consumer making the effort to come to your store. To offer options and diversity, Hope Farms offers two types of boxes online, and a la carte ordering (Whitticase, 2021).

Advantages of online sales is that it is efficient in terms of producers’ time (after initial set-up) and it keeps sales organized. Hope Farms states that it is nice to set up a Monday to Friday selling operation and not have to do markets on Saturdays. Spray Creek Ranch describes that sales at a Market would take a while on the spot, especially in the case of frozen meat since people can’t really browse the inside of a cooler. Contrary to this, online sales are pre-ordered and the Ranch does 4 different drop spots each once a month. (Banwell, 2021 and Whitticase, 2021).

Another advantage is that despite some technology challenges, the systems are easy to set up for anyone with moderate computer literacy. Producers interviewed vouched that customers are ready for these systems and their transition was fairly smooth. Local Line is a Canadian company that was used by the BCAFM during COVID when markets could not run. BCAFM paid for Local Line and paid fees for FMs to set up their vendors on Local Line. By now, a lot of Farmers Markets and farms have participated, so there is a lot of experience out there to draw from. Another producer interviewed is using Squarespace. There are various options to choose

from, and within each program there is a large range in costs depending on who it is set up.¹⁸ See the text box below for more information on different systems.

There are potential co-benefits related to the choice of a customer pick-up spot . This can be an opportunity to build the farm's relationship with other local business. For their Lillooet drop, Spray Creek Ranch works with a small local health store that allows them to use area for a pick-up point, this helps the store to bring in extra business. Hope Farms work with local retailer Birch and Boar. Birch and Boar carry local meat and bread, but hope to branch out into produce. For now, the weekly Hope Farm pick-up begins to grow a producer customer base in that location.

It is important to remember that costs (capital costs plus time and effort) of an online store is similar to the cost of selling at an actual store. The key benefit is control over what time of day labour is going into the online marketing portion and customer service.

An online store could be more valuable if run in a co-operative sense. An online store representing multiple farms would allow farms to share the cost of one staff to manage the store and the farm share of it's operating costs. The Hope Farm co-operative model will ultimately bill each farm for their use of the online store based on sales each week. For example, if one farm sells 80% of sale in one-week they cover 80% of store operating costs for that week.

Hope Farms Online Store

We have pickup and delivery options, delivery kilometers tracker, we accept wide variety of payment platforms. It has everything we need at this point. Squarespace- is great for website pages, really detailed, but if you want to do pick-up and delivery you need a costly add-on.

But there are other major sales platforms that are geared towards farms, food etc. but these are a lot more expensive. Farmago, for example, is about \$500 set up, and a monthly fee of a few hundred dollars. You need a guaranteed sales base to use this system. Shopify is only approximately \$30 -\$50 a month. An advantage of Shopify is that you can link quick books to it for accounting purposes. It can also be linked to Instagram and Facebook, in order to sell directly off of these platforms. However, Shopify is quite limited if you want to have additional pages or interactive platforms (Whiitcase, 2021).

¹⁸ Spray Creek Ranch needs a lot of catalogues set up within their online store (retail, retail re-sell, wholesale). You pay extra to track inventory, pay extra for variable weight pricing. Use of Local Line starts at about \$700 a year (2021 cost).

Direct to Foodservice

Selling products directly to the foodservice industry (restaurants, catering operations, hotels, institutions) is also an option. This industry requires larger packages of product and less elaborate packaging, which can reduce costs for the producers and reduce packaging-related barriers. Another advantage is that selling wholesale to foodservice is generally a consistent income stream (albeit not during the exceptional circumstances of a global pandemic). However, the product still needs to be differentiated or unique, and substantial coordination and customer service would still be required (B.C. Ministry of Agriculture, 2018).

Farmers that successfully sell to local restaurants are predominantly located close to larger centres and are able to establish arrangements with higher-end restaurants. Those who had attempted to access this market in smaller centres indicated that the challenges eventually outweighed the advantages. Producers indicated that investment for travelling a distance of more than a couple of hours outweighs potential benefits, and that restaurants in smaller communities (closer to the production site) are generally serving a limited and basic menu (B.C. Ministry of Agriculture, 2018).

The challenges of this market are more pronounced for producers selling meat. Meat processed in Class D or E facilities can only sell to restaurants within their region. Restaurant customers in Northern B.C. and in the Robson Valley do not appear ready to pay a premium for locally raised meat, therefore restaurants cannot recover the additional cost of local meat. Restaurants only want specific cuts, leaving producers with large quantities of cheaper cuts to find markets for. In order to obtain full carcass utilization, the producer or salesperson needs to be creative in finding markets for each cut and balance this with the number of animals to be processed each month (Gunner and Watt, 2012). To address this challenge, Spray Creek Ranch only sells 3 items wholesale to a local restaurant: eggs, ground beef, and whole chickens (Banwell, 2021). Even with focusing on select and efficient products, many smaller producers cannot meet the demand of supplying restaurants in an on-going way, since livestock is seasonal and is generally slaughtered in the fall and early winter (with the exception of poultry). To supply local meat to restaurants out of the region several small producers would have to work cooperatively and also have their animals processed at a Class A or B facility. Contrary to this, for mid-sized and larger producers, the local restaurant market was seen as being too small to be of interest.

A disadvantage is that any wholesale has to be sold at a discount, this is not advantageous when a farmer has limited supply of a certain product due to constraints such as quota, pasture area or access to unique animal stock (Banwell, 2021). Another challenge is the need to maintain quality and quantity year-round. This is often mentioned as a critical challenge for fruit and vegetable producers. Also, restaurants require deliveries at specified times of the day and day of the week, which can be problematic for a producer's schedule.

Direct Sales Volumes

A 2012 report estimates volumes that various purchasers buy; these vary considerably. In general, independent restaurants and catering companies purchase by the individual case while

the largest buyers are buying pallet or multiple pallet quantities (2,000 lbs.) on a weekly basis (Gunner and Watt, 2012). On the production side, in 2012, four Robson Valley farms were selling case quantities of vegetables and three Robson Valley farms were selling pallet quantities (2 meat producers and 1 vegetable producer). The 2012 report found that opportunities in the hotel restaurant or restaurant sector aligned reasonably well with meat and vegetable production volumes. Only a few operations were capable of supply volume to supply wholesale or institutional volumes.

6.3 Wholesale Purchasers/Distributors

The British Columbia retail food industry is comprised of traditional chain stores and supermarkets, independent supermarkets and non-traditional food retailers such as big box, convenience, discount, drug and other specialty stores. Most retail grocers and foodservice purchase the majority of their goods from distributors and/or food brokers.

The opportunity for bulk sales to distributors/wholesalers requires a large scale of production (by B.C. standards) and meeting many other legal and quality requirements. For produce producers who have a sizable harvest, bulk sales enable the sale of an entire crop at one time to one buyer. This minimizes the need for marketing and transportation. The challenges of entering this market are largely the additional permits and certifications required, which are outlined below. Another limitation is that the producer is very vulnerable if the buyer backs out when there is a single buyer for an entire crop.

Some of the requirements for small or medium farmers to access distribution networks are outlined below.

Requirements

“The Canada GAP food safety program is not price prohibitive.¹⁹ It (GAP certification) is all stuff that the majority of famers do today, they just don’t document it.” (Bregg, 2021)

Producers will need to:

- Have access to packing and grading facilities to pack orders in food grade boxes/containers in order to adhere to the packaging and labelling requirements for fresh fruit and vegetables (*Consumer Packaging and Labelling Act*). These are variable across Northern B.C., with none in the Robson Valley. Most commercial scale produce growers have their own on-farm facilities.
- Use of Universal Product Codes.

¹⁹ Costs include a third-party audit (rates differ by auditor) and annual program fees (Canada GAP, 2021).

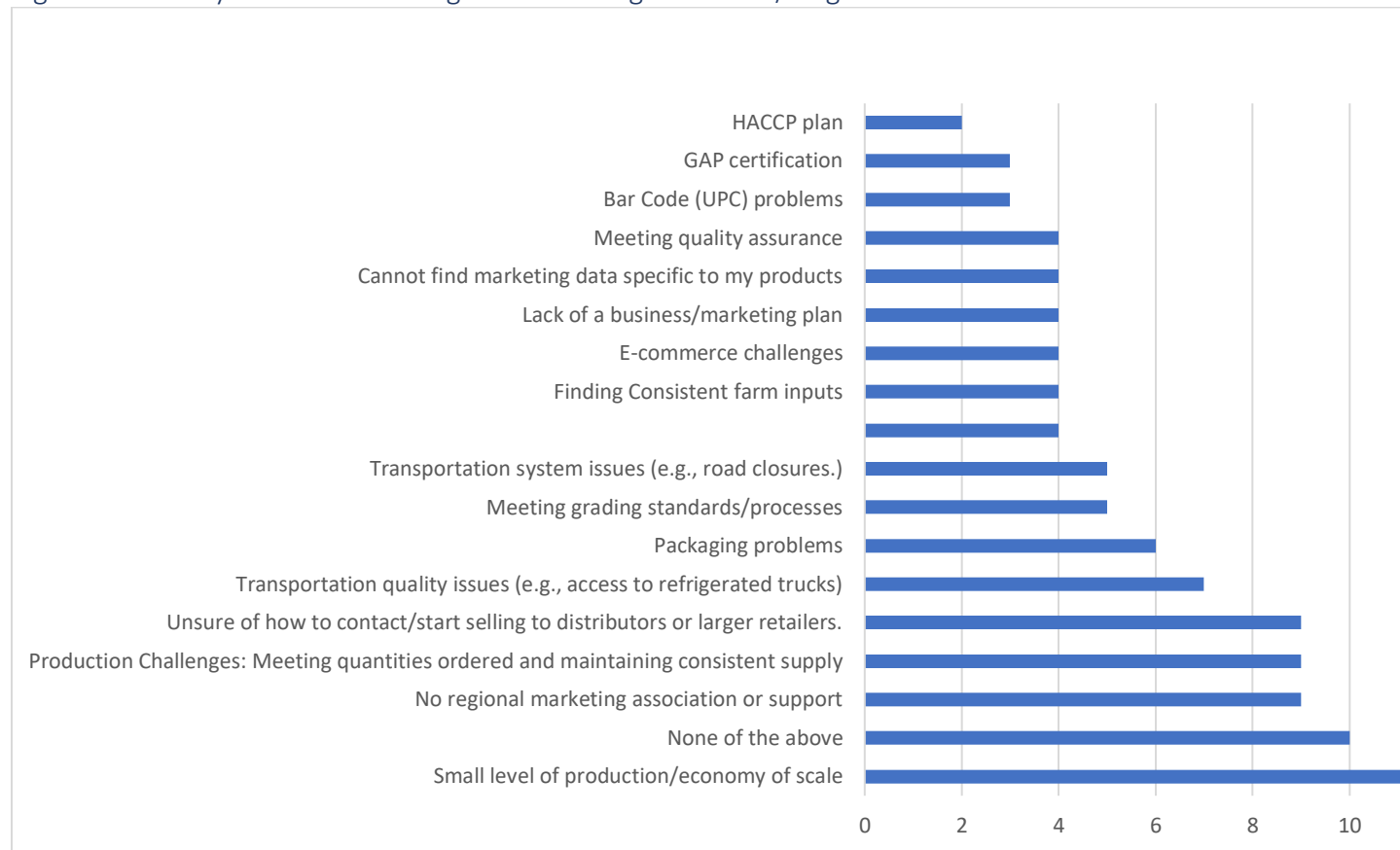
- Adhere to the Canadian Grading standards laid out in the Fresh Fruit and Vegetable Regulations
- Obtain Good Agricultural Practices (GAPs) certification and/or implement the Good Manufacturing Practices (GMPs) certification, and apply HACCP programs Hazard Analysis Critical Control Point (depending on the criteria of the distributor or customer). Key aspects of these certifications are:
 - To have a product recall strategy
 - To have water tested annually
- Ensure proper transportation for refrigerated or chilled delivery for some products: ²⁰
 - Transportation of perishable commodities is subject to food safety regulations. Regulations cover all aspects of transportation, including equipment requirements, operating procedures, and record-keeping. In Canada, interprovincial and international shipments are regulated by the *Safe Food for Canadians Act and Regulations*. In B.C., intraprovincial shipments are regulated under regulations specific to each commodity (Milk Industry Standards Regulation, Fish and Seafood Licensing Regulation, Meat Inspection Act, etc.) (Davies Transportation Consulting Inc., 2020).
- Establish purchase planning cycles (can be 6 months or longer)
- Price product to account for distributor/wholesaler margin percentages of 25% - 35% (Government of British Columbia).
- For produce, conform to B.C. Vegetable Marketing Commission rules, be a licensed Producer-Shipper or be part of a Designated Agency.

Survey Results

The list above may appear extensive, but some of these requirements are more challenging than others, and may or may not be the major barrier for farmers/ranchers to access larger retailers/wholesale markets. The survey asked respondents to identify which challenges affect their ability to sell to distributors and/or larger retailers, and the primary challenges stated are reaching/maintaining volume of supply, lack of marketing support and lack of information/uncertainty about the process of connecting with these markets.

²⁰ For meat production, the threshold for viability to lease or purchase a reefer trailer, camper or delivery van is a monthly sales volume exceeding 15 animals per month (Gunner and Watt, 2012).

Figure 12: Survey Results – Challenges in accessing wholesale/ large retail



(29 responses)

Wholesale/Distribution Purchasing Policies and Processes

Targeted interviews and a review of purchasing policies/ criteria available online from a sample of wholesalers, retail chains and distributors provide information on opportunities for Robson Valley producers with this channel. The table in Appendix 8 includes a brief description of each company, what volumes they typically purchase, their purchasing criteria and what process a producer would follow to get in touch.

In summary, of the seven reviewed, 3 (Georgia Main Food Group, Associated Grocers, and Discovery Organics) prioritize B.C. product whenever they can purchase it. In the case of SPUD, all of the farms they work with are less than 800km from their Vancouver warehouse. 5 of the 7 work with either only certified organic producers, or prioritize organic product, or look for other forms of certification related to sustainable production, health concerns and other ethical concerns (i.e. pesticide free, non-GMO, labour standards). Minimum volumes purchased were cited as “3 pallets”, “from a 9-acre operation”, and “enough product to supply 3 stores for one weekend” in special cases. More typical volumes would be product for 30 stores/ truckload scale. The process to explore becoming a supplier is to make direct contact for 4 of the companies, and to fill out an online form for the 3 other companies.

This brief review verifies that there is strong support for B.C. products, organic certification or other certification are assets, and many purchasers are quite accessible and available to discuss opportunities with producers who can supply adequate volume and quality, or who are seriously interested in scaling up their production. Distributors known for mentoring producers and who have contributed greatly to the growth and profitability of their growers are Discovery Organics in Vancouver and Bulkley Valley Wholesale in Smithers.

Brokers

Brokers can be utilized along with a distributor as they will promote the product both to the distributor and to the end consumer. Brokers provide a range of sales and marketing services and sell directly to retailers and distributors. A successful broker has expertise in the desired market and established relationships with buyers, allowing them secure shelf space much more efficiently than a producer working on their own. While distributors buy product from processors, brokers do not. Brokers typically charge a percentage of sales ranging from 3% - 10% depending on the services required (Government of B.C.).

Brokers can help to scale a business, they help farmers build up their program to be able to sell to wholesalers, and they ensure that growers are hitting marks of quality and availability (Charlton, 2021). Brokers do not appear to be at all common in B.C. and are likely more common for larger food companies and processed products. Not a single broker was identified during the background research nor through the targeted interviews to participate in an interview, however a broker's expertise would be valuable for B.C. producers to draw upon. There are no brokers based in the RV or serving the RV community directly.

6.4 Commodity Sales

Livestock Auctions

Beef auctions are located in Kamloops, Vanderhoof, Williams Lake and Okanagan Falls, lamb auctions are locations farther away (B.C. Livestock, 2021). After the auction, beef is finished in Alberta, and lamb are finished in either Alberta or the Fraser Valley. Transportation of live animals is challenging and can reduce the quality and price fetched for livestock. Selling live animals is not the most lucrative product for producers and has much smaller profit margins than selling butchered meat (B.C. Ministry of Agriculture, 2018).

Marketing Organizations

Supply-managed commodities (dairy and poultry) as well as vegetables that are regulated by the B.C. Vegetable Marketing Commission, are sold directly to the appropriate marketing board or commission.

6.5 Other Markets

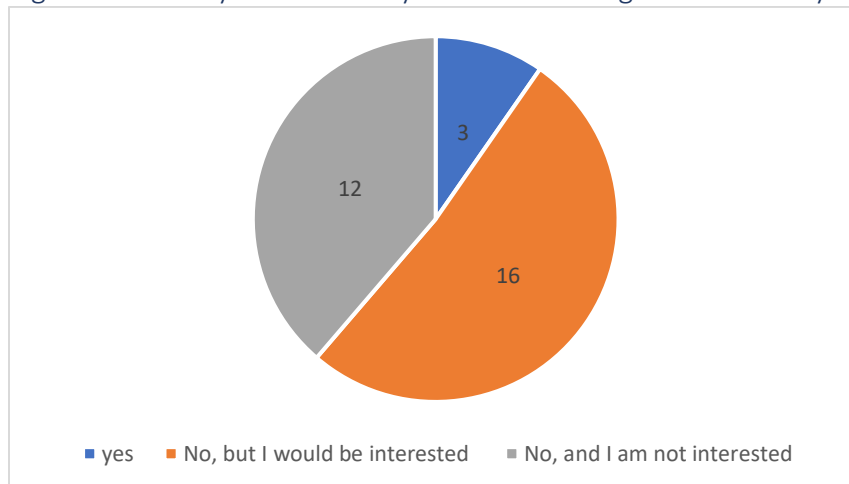
Other types of markets, which may be reached through a combination of direct sales, distributors or brokers are work/industrial camps, the tourism sector (tourist stores, tourist attractions, tourism operations that include meals), special events, Agri-Tourism, gift stores,

delicatessens, specialty stores, craft fairs to specialty distributors, co-ops, health food/specialty stores and institutional local purchasing/procurement.

Agri-Tourism

Survey respondents were asked if they are involved in any form of Agri-Tourism activities on their farm. Only 3 respondents are currently involved in agritourism, but 16 (or 57%) indicated that they would be interested in being involved in Agri-Tourism.

Figure 13: Survey Results -Are you involved in Agri-Tourism on your farm?



Institutional purchasing

Institutional purchasers could include schools, hospitals, long term care facilities, correctional facilities or industrial camps. In the Robson Valley there were not enough substantial potential institutional markets to justify an exploration of this channel within project scope. Local municipalities/ villages within the Robson Valley may be interested in local procurement for meetings and events, but with all events on hold during the pandemic- it was not an opportune time to explore this at the time of this report. Small health centres and other institutions across the Valley would be too small to purchase institutional volumes.

Outside of the Robson Valley, nearby institutions capable of purchasing institutional volumes are the University of B.C, College of New Caledonia, Prince George Regional Hospital, Prince George Civic Centre, industrial camps (Central Interior Catering in Prince George states on their website that they offer full-service camp coordination including catering) and Prince George Regional Correctional Centre. The Beyond the Market project explored opportunities for institutional procurement in Northern B.C. including the Robson Valley. This project found that the complexity of institutional procurement processes posed a major barrier to success. It was found that even in cases where procurement decision-making was more autonomous, other barriers prevented success including human resource capacity within the institution, and/or lack of an internal champion (Gunner and Watt, 2012). Exploring the extent of this potential market within the Robson Valley could be a small follow-up project.

6.6 Robson Valley Sales Channels

Survey results

Survey respondents were asked through what channels they sell their products and make their farm incomes and to indicate their primary, secondary and tertiary sales channels. The results are shown below first by farm income (Figure 14) and then by weight/volume (Figure 15). The majority of sales was “other”, followed by farm gate retail, box program and home delivery. Secondary sales channels were these same avenues, with the addition of mail order. Tertiary channels were most commonly still these same channels. It is unclear from the results how home delivery is implemented with such low reports of online sales, mail or phone orders and standing orders. It appears that fewer farmers, likely only a small sample, sell to wholesalers/distributors or grocery retail as a primary, secondary or very small component of overall sales. This re-confirms the importance of the barriers and challenges in accessing commercial markets outlined in Sections 6.2 and 6.3 and indicates a potential opportunity to begin to shift the ratio of these sales channels.

“Other” represents a large proportion of sales, yet it is unknown how this category was interpreted. A few interpretations could be:

- 1) A misinterpretation of farm gate retail by respondents. The term retail could be misleading and may have been interpreted as a formal store, whereas “farm gate retail” was intended to capture farm stands and any form of sales directly from the farm.
- 2) “Other” could capture livestock auctions. This is likely a major form of sales for livestock producers (of which there were many respondents). It was an oversight to not have included this category in the options
- 3) “Other” could include beef shares, or other whole animal shares.
- 4) There is a local poultry cooperative, where producers pool their resources and collaborate on poultry production and slaughter, then share the end products.
- 5) “Other” could include trading among and between farmers of produce, meat or value-added products.
- 6) E-mail listservs
- 7) Sales directly to marketing boards for supply -managed operations (dairy, poultry) or the B.C. Vegetable Marketing Board for vegetables

Figure 14: Survey Results -Robson Valley Sales Channels by Farm Income (n=28)

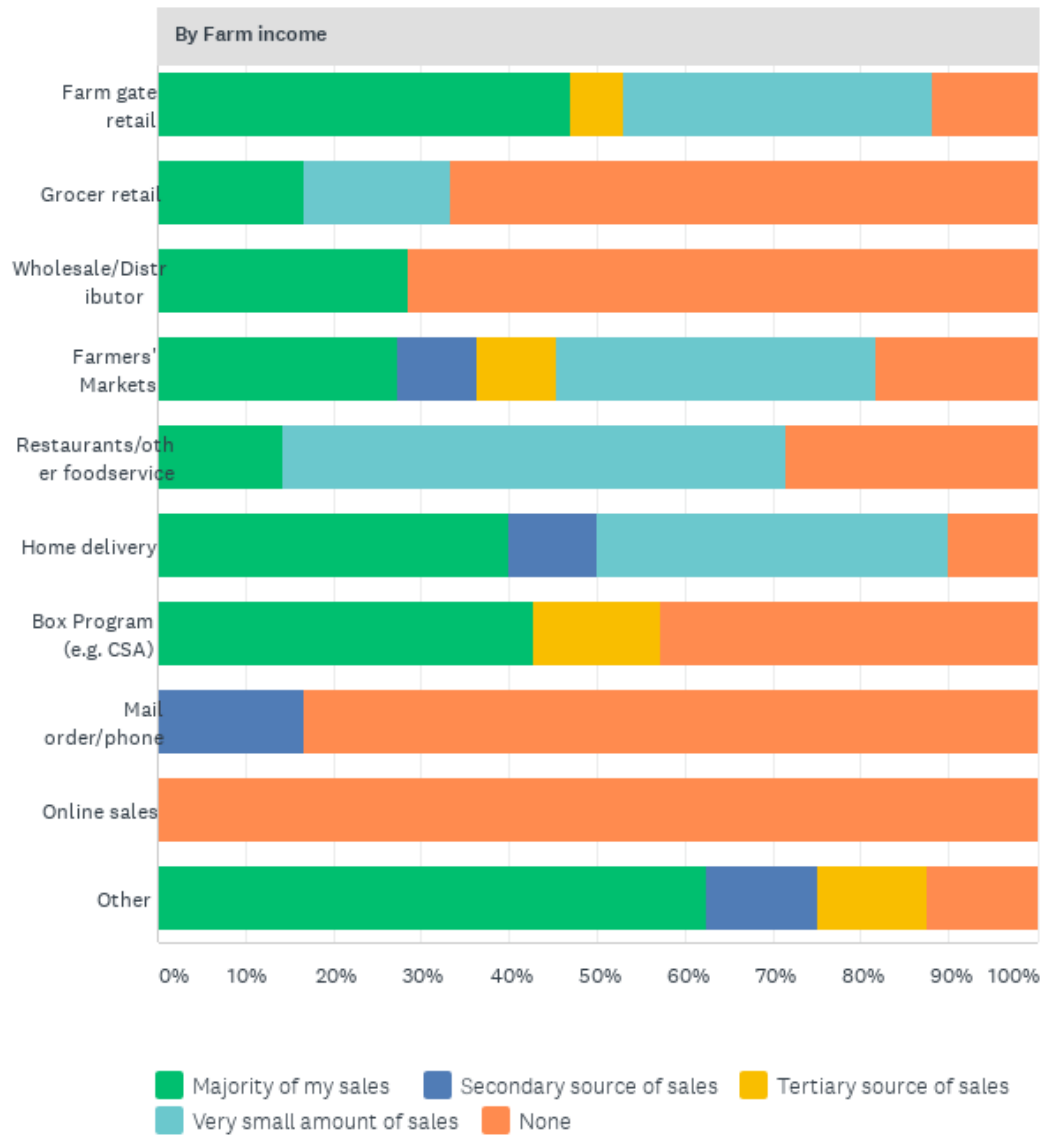
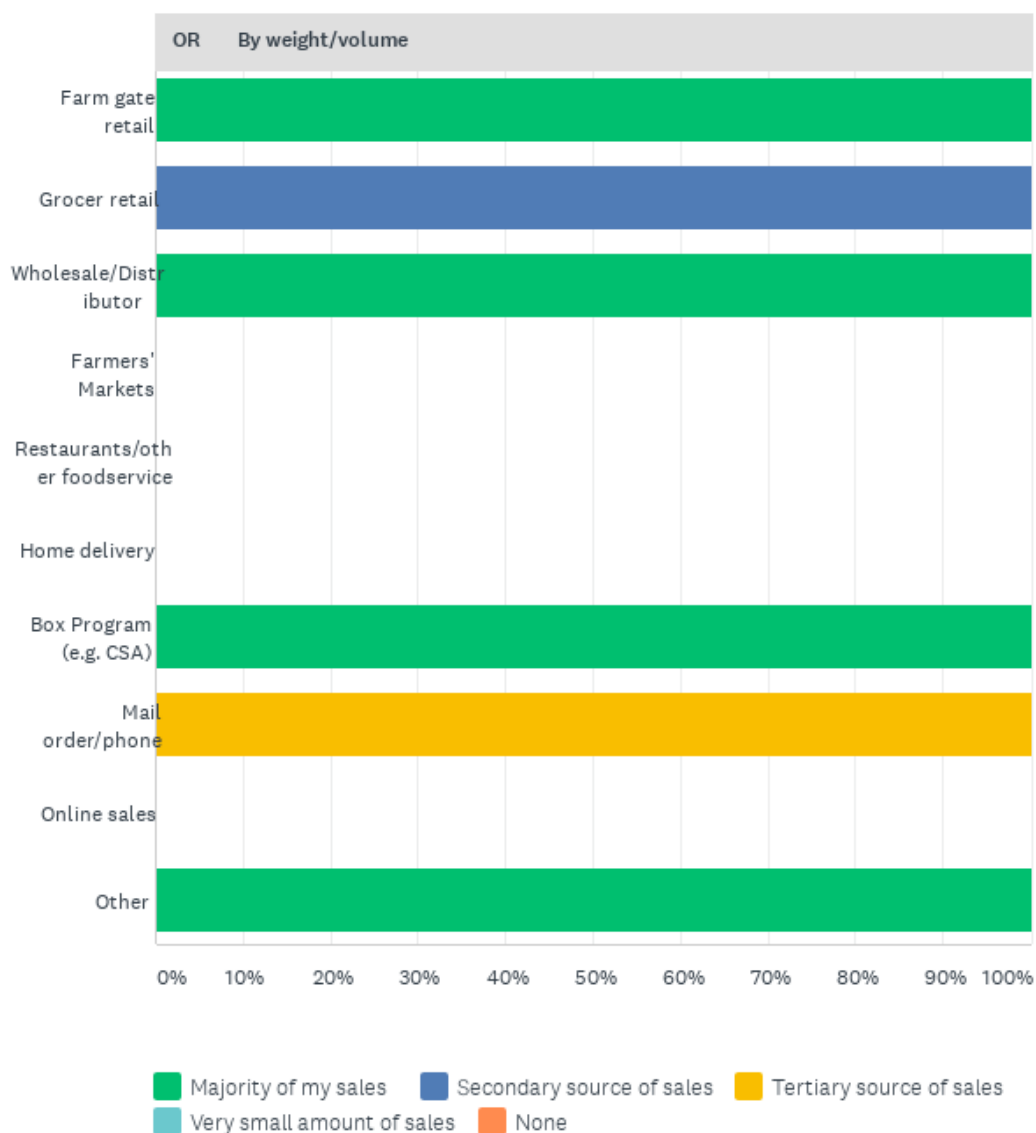


Figure 15: Survey Results -Robson Valley Sales Channels by Weight/volume (n=28)



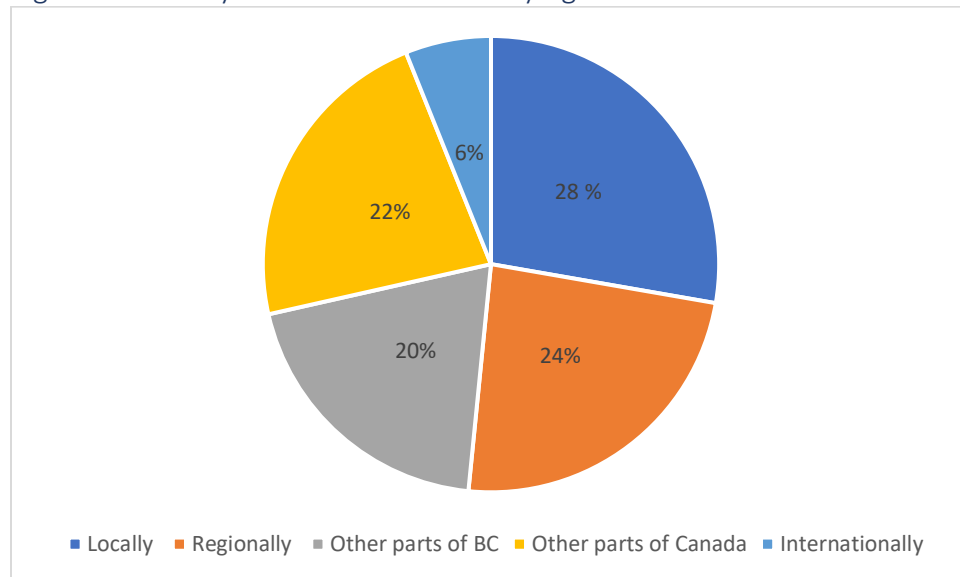
Respondents were asked where they sell their products; the options were:

- locally (within the Robson Valley);
- regionally (Central Interior, Hwy 16, neighbouring regions);
- other parts of B.C.;
- other parts of Canada; or
- internationally.

Results show that a small majority primarily sell their products locally. However, there was a fairly even spread between selling locally, regionally, in other parts of B.C. and in other parts of Canada. Only 1 producer reported to sell internationally. At first glance, this would appear that Robson Valley products are sold in faraway markets. However, many respondents who selected “other parts of Canada” were likely referring to nearby Alberta markets, immediately across the

border. Jasper, and other nearby Alberta markets, may have also been included under the selection “regional”. (Figure 16). These results indicate that RV producers are diversifying where they sell, and are already accessing markets outside of their local and regional market.

Figure 16: Survey Results - Robson Valley Agricultural Location of Sales



7.0 Food Consumption Trends and Preferences

Statistics on B.C. average household spending on fresh foods multiplied by the number of households in a community is useful to provide a coarse idea of the size of the potential market. However, this is only a potential maximum market size, which would require a large amount of consumer education and targeted programs in order for B.C. local and Robson Valley local products to capture additional market share. It is more useful to look at the segment of consumers in Northern/Interior B.C. and in rural communities who are already buying local B.C. food. This section provides an overview of spending/consumption patterns at the coarse level and at a finer grain level. It also summarizes consumption trends and statistics in relation to specific commodity types: meat, produce, organic, and Farmers’ Market shoppers specifically.

7.1 B.C. Average Household Food Spending

Tables 7 and 8 below show that the average B.C. household spends \$10,091 annually on food in 2021 dollars. Of this, \$3,277 is spent on “fresh” foods (including dairy which may or may not be processed).

Table 7: B.C. Average Household Spending on Fresh Foods

Food group	2016 spending	2021 dollars²¹
Fresh Fruit	\$521	\$569
Fresh Vegetables	\$660	\$720
Dairy products and Eggs	\$914	\$998
Cheese	\$241	\$263
Meat (excluding processed)	\$666	\$727
Processed meat	\$399	\$436

Source: Statistics Canada, 2017

Table 8: B.C. Household food spending

Type of spending	2016 \$	2021\$
Food purchased from stores	\$6,277	\$6,851
Food purchased from restaurants	\$2,968	\$3,240
Total avg household spending 2017	\$9,245	\$100,91

Source: Statistics Canada, 2017

Of the \$100,91 annually spending, \$3,240 of this is spent at restaurants. The portion of food spending at restaurants had been holding steady on average and increasing in urban areas before the pandemic. See Section 9.3 for more recent grocery/foodservice spending ratios. Consumer demand for local food has increased interest from local restauranteurs and retailers. (Gunner and Watt, 2012).

7.2 2021 food spending projections

To get a rough idea of the size of potential local, regional and provincial markets, average household spending on fresh foods was calculated by the number of households in nearby communities, and then further filtered to look at spending of demographic segments with high potential. Characteristics of B.C. consumer segments with high potential to purchase local food are defined in detail in the B.C. Agrifood and Seafood Domestic Consumption Study (Advanis, 2018). For this exercise, certain demographic characteristics were isolated that are common across high potential segments. These characteristics were: between 45-75 years, couples without children, couples with 1 child and families with a household income of \$100,000 or over. These projected expenditures are then calculated into equivalent 2021 dollars (Bank of Canada, 2021). Projections of sample markets do not account for 2021 population statistics, but the tables below indicate the population trend between 2011 and 2016. Further, calculations do not account for the documented shift of ratio from foodservice to grocery (documented in Section 9.0), which would cause these potential markets for fresh food to jump substantially

²¹ 2021 dollars are calculated using Bank of Canada inflation rate of a 9.15 percent change between 2016 and 2021 as used in the Bank of Canada inflation calculator. <https://www.bankofcanada.ca/rates/related/inflation-calculator/>

higher. Additional tables are shown in Appendix 9 and select results are shown below (Table 9a, 9b, 9c, 9d).

Table 9a: Robson/Canoe Valley Consumer Segment Annual Spending on Fresh Food

Characteristics	Entire Robson/Canoe Valley	Robson/ Canoe Valley Sample Potential Markets (2021 dollars)
Population; 2016	1586	
Population percentage change; 2011 to 2016	-4.7	
45-75 years	845	
Total number of census families	510	\$1,671,270
Couples without children	310	\$1,015,870
1 child	70	\$229,390
\$100;000 and over	105	\$344,085

Table 9b: Jasper Consumer Segment Annual Spending on Fresh Food

Characteristics	Jasper	Jasper Sample Potential Market (2021 dollars)
Population; 2016	4590	
Population percentage change; 2011 to 2016	3.6	
45-75 years	1570	
Total number of census families	990	\$3,244,230
Couples without children	450	\$1,474,650
1 child	195	\$639,015
\$100;000 and over	515	\$1,687,655

Table 9c: Prince George Consumer Segment Annual Spending on Fresh Food

Characteristics	Prince George	Prince George Sample Potential Market (2021 dollars)
Population; 2016	74003	
Population percentage change; 2011 to 2016	2.8	
45-75 years	26635	
Total number of census families	20535	\$67,293,195
Couples without children	8530	\$27,952,810
1 child	3225	\$10,568,325
\$100;000 and over	7810	\$25,593,370

Table 9d: Vancouver Consumer Segment Annual Spending on Fresh Food

Characteristics	Vancouver	Vancouver Sample Potential Market (2021 dollars)
Population; 2016	631486	
Population percentage change; 2011 to 2016	4.6	
45-75 years	226580	
Total number of census families	160855	\$527,121,835
Couples without children	71270	\$233,551,790
1 child	28895	\$94,688,915
\$100;000 and over	67015	\$219,608,155

These rough calculations do not follow a perfect methodology, nor do they account for competition or how much market share Robson Valley producers could realistically capture. However, it is clear that the size of high potential consumer segments and the amount they spend annually on fresh food is significant, and has a high likelihood of growing.

7.3 Cariboo/North Consumer Segments

All consumers are far from equal, and market research uses consumer segments to identify what values are important to which consumers and where these segments fall on their likelihood to buy a certain product. The B.C. Agrifood and Seafood Domestic Consumption Study (Advanis, 2018) report identifies five segments with high potential to buy B.C. product, these segments collectively represent 50% of all shoppers in B.C. The 5 segments include individuals who are concerned about the freshness and safety of the food products they buy, and who care about the ecological, economic and/or social impact of their purchases. They attribute a high benefit to consuming B.C. products and purchase many of them frequently. The study also identifies medium-potential segments (a harder sell, but still a potential market) (Advanis, 2018).

Regional differences

It is important to note the regional differences that are not evident in the high-level study statistics. The Vancouver Island/Coast, Thompson/Okanagan/Kootenay regions and Mainland/Southwest regions include a slightly higher proportion of individuals who have a high interest in premium local food and are unconcerned about price. It is not surprising that the Lower Mainland market has been often identified by northern producers as a potential opportunity in previous work and in discussions.

Cariboo/North consumer segments

However, the data pertaining Cariboo/North region (the study sub-region most representative of the Robson Valley local and nearby consumers), does contain a significant proportion of high

potential segments. Table 10 shows that 47% of consumers fall into high potential segments. The most promising high segments categories are “fresh, natural eaters”, “healthy meal cooks” and “socially conscious adventurers”. Each of these 10 segments are quite unique, but there are some similarities between the 5 high potential segments. Certain demographic traits were selected for calculating potential market size in Section 7.2, these are: no children or 1 child, between the ages of 45-75 and average to high income. Not surprisingly, the Cariboo/North region also has a higher concentration of price-sensitive segments, who are not naturally inclined to look for local food products (Advanis, 2018).

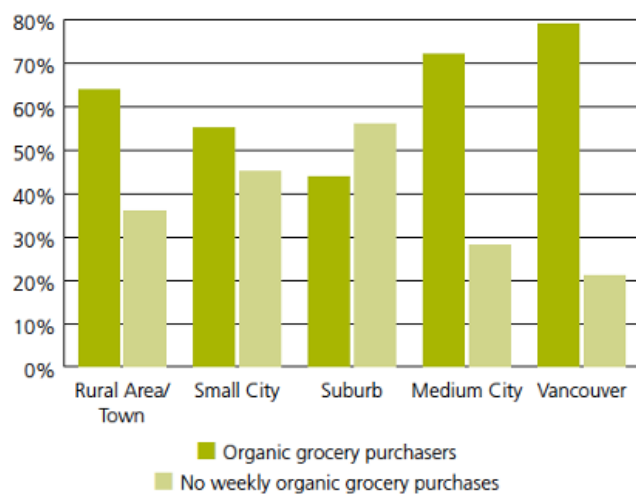
Table 10: Overview of Cariboo/North food consumers

	B.C.	Cariboo/North
High Potential Segments		
Premium Food Seekers	12%	9%
Healthy Meal Cooks	8%	10%
Convenient Local Meal Proponent	8%	5%
Socially Conscious Adventurers	9%	10%
Fresh Natural Eaters	12%	13%
	49%	47%
Moderate Potential Segments		
On the Go Label Readers	8%	7%
Selective Snackers	9%	6%
Price Conscious Foodies	11%	12%
Subsistence Eaters	9%	16%
Kitchen Strangers	12%	12%
	49%	53%

Source: Advanis, 2018

To further illustrate consumer preferences by geography, Figure 17 indicates that tendencies to purchase organic products are high across B.C., and are not limited to cities or suburbs over rural areas. Over 60% of shoppers in rural areas and small towns buy organic purchases weekly.

Figure 17: Geographic Distribution of B.C. Organic Buyers



Source: Mackinnon, 2013

Consumer market preferences

While residents are buying B.C. products primarily from mainstream supermarkets, hypermarkets (such as Costco) and retail channels, a diversification is taking place, with nearly 60% buying B.C. products at specialty stores, 65% at Farmers Markets, and a small proportion using budding channels, such as convenience stores, subscription services, and delivery services. This trend is observed with respect to unprocessed, processed and prepared food markets (Advanis, 2018).

Table 11 indicates where consumers commonly purchase B.C. food items. See Section 9.3 for current purchasing pattern trends.

Table 11: Where residents purchase B.C. Food Products

Supermarket	88%
Farmers' market	65%
Specialty store	59%
Hypermarket or clubs (e.g. Costco)	48%
Convenience store	20%
Harvest box or CSA	8%
Online	4%

Source: Advanis, 2018

7.4 B.C. Consumer Preferences

In the Opportunities Assessment for B.C. Vegetable Sector 2012 report, five factors were identified which differentiate B.C.'s consumer population from other provinces. These factors characterize B.C.'s population and shape their attitudes towards food, in turn, influencing what types of foods are desired. B.C.'s population is more ethnically diverse and older than other parts of Canada. A higher percentage of B.C. consumers have expressed a desire for foods that offer an environmentally conscious choice, such as organics and local/regional food. A larger percentage of the population is more financially disadvantaged, in terms of disposable income, than the national average. Lastly, the B.C. populous has a greater size and range of economic diversity. Therefore, certain segments of the market possess the desire and ability to pay for attributes such as provenance, freshness and taste, while others clearly do not (Gooch et al, 2012).

Another study, focusing on comparing organic consumers to non-organic, identifies other factors that will influence products and brands that they buy. These trends (Figure 16) are fairly similar for organic and non-organic products and show that the top three factors are: value for money, recommended by a friend or family member and recommended by a health professional (Mackinnon, 2013).

A 2018 study, the B.C. Agrifood and Seafood Domestic Consumption Study, is the most in-depth reference available that breaks down consumer preferences by region and by a set of characterized consumer segments. When purchasing food, B.C. residents are primarily influenced by their interest in:

- supporting the local economy (80%)
- the desire for food that is fresh (79%) and
- food that is safe to eat (77%) (Advanis, 2018)

All these are factors strongly associated with local food, and are the main drivers for leveraging to increase B.C. product purchases (Advanis, 2018).

In terms of what types of producers B.C. consumers are likely to buy from local producers, food staples, such as eggs, fresh fruits and vegetables, and milk, are the most likely products to be sourced locally (Table 12).

The overall market for prepared food in B.C. is significant. Nearly two-thirds (66%) of residents buy prepared food at least a few times a month; one-quarter (25%) buy it a few times a week. The demand for B.C. products in this market is still limited but is growing for emerging and gourmet products, such as raw fish and raw seafood, alcoholic beverages, and snack foods (Table 13).

Table 12: Purchases of B.C. unprocessed Products

Purchases of B.C. Unprocessed Products	
Eggs	69%
Fresh Fruit and Vegetables	67%
Milk	62%
Raw meat and poultry	55%
Raw fish and seafood	34%
Grains, nuts and seeds	23%

Source: Advanis, 2018

In this same B.C. wide study, focused on in store retail (not direct sales) factors that would cause respondents to buy B.C. products more frequently are:

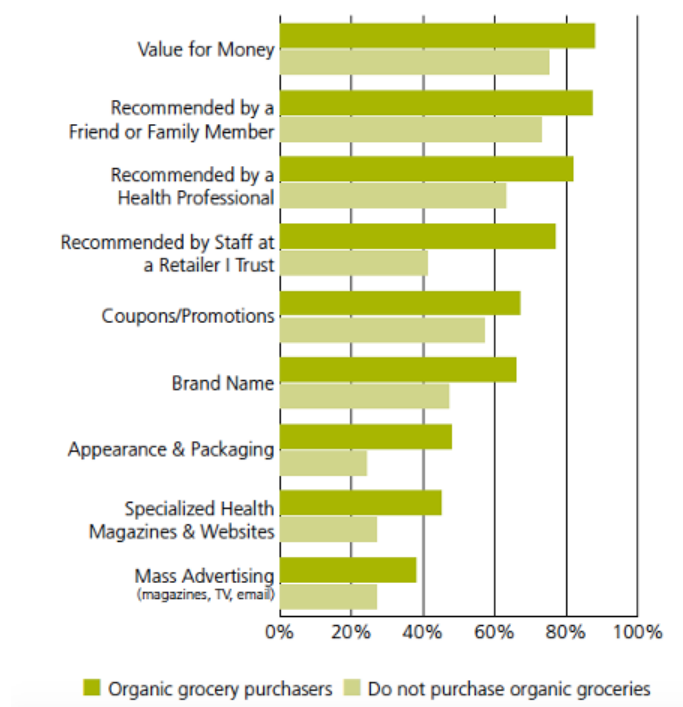
- if offered competitive prices and promotions (93%)
- if products were easy to identify through store signage and product labeling (89%)
- if a broadly recognizable “From B.C.” seal (83%) is used, and
- if more information about when products were produced, their origin, their ingredients, and the production method was available (87%).

Table 13: Purchases of B.C. Processed Food Products

Purchases of B.C. Processed Food Products	
Baked goods	50%
Dairy products other than milk	44%
Alcoholic beverages	22%
Pantry items	21%
Non-alcoholic beverages	21%
Snack foods	17%
Natural health products	12%
Plant-based proteins	6%

Source: Advanis, 2018.

Figure 18: Percent in B.C. reporting the following influence of the products/brands they buy



Source: Mackinnon, 2013

Farmers Market Consumers

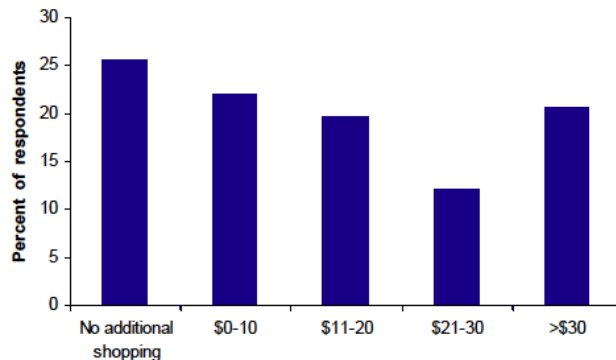
For consumers who shop frequently at Farmers Markets, the following factors are important for customers: nutritional content, in season, food safety, animal welfare, appearance of product, grown in B.C., grown locally, natural (not necessarily certified), packaging (presumed to mean sustainable materials or less packaging), fair trade, grown/ produced by someone (presumed to mean connection to grower). Factors not important for these frequent Farmers Market shoppers are certified organic, grown/produced in Canada, low price, packaging (aesthetics of), brand name, ease of preparation (B.C. Association of Farmers Markets).

RV producers can appeal to these factors by educating market customers on nutritional content and their growing practices (if natural), ensuring the farm location is prominently displayed, utilizing sustainable packing and sharing information on easy recipes.

Farmers Market shoppers frequently do additional shopping in nearby businesses when at the market. This willingness to spend at other businesses presents an opportunity for Farmers' Market vendors to capture some of this shopper spending by diversifying their products offered or by selling value added products (B.C. Association of Farmers Markets). Figure 19 indicates how much shoppers will typically spend at nearby markets. RV producers selling at Farmers Market should seek opportunities to add a value-added product to their selection or look for

other products to add based on specific market gaps (i.e. cut flowers, frozen fruit, non-quota eggs).

Figure 19: Farmers Market consumers additional nearby spending



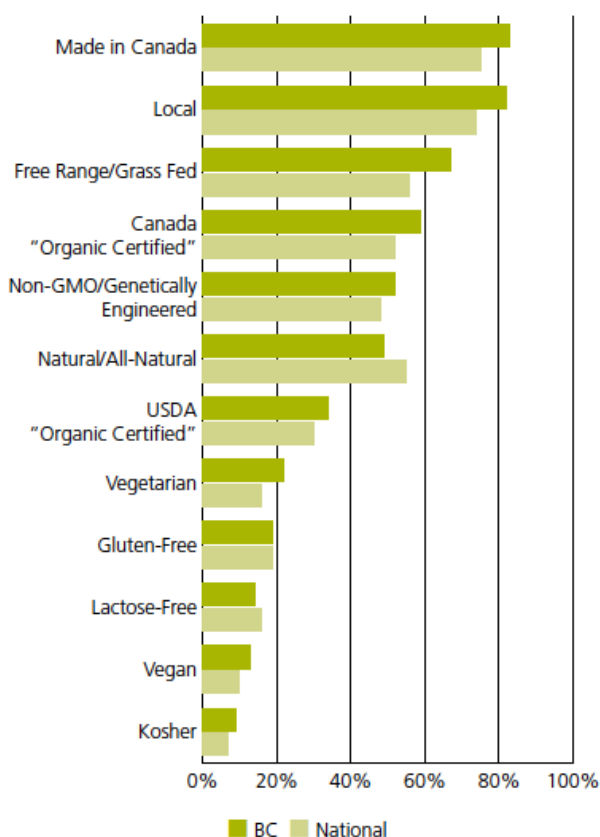
Source: B.C. Association of Farmers Markets

Organic Market and Consumer Profile

The organic market in Canada has grown exponentially over a very short period, to the point that it is now the fourth largest in the world. There is a high and growing demand for organic products (e.g. Vancouver Island organics sales are growing 20% annually but, over 80% of organics sold is imported). This market does not show any signs of slowing down. When asked about their buying intentions over the next year, 98% of B.C. respondents indicated they planned to maintain or increase their purchases of organic fruit and vegetables. (Mackinnon, 2013).

While the information on B.C. Farmers Market shoppers shows that food grown in B.C., local and natural food, is more important than certification, the data on organics is different. Per Figure 20, for B.C. consumers generally, the level of influence of claims such as “made in Canada”, “local”, “organic”, and “non-GMO” and some degree of confidence in these claims, are higher in B.C. than nationally, while the influence of “natural” or “all natural” claims is lower. This suggests that, in general, there is a more perceptive and informed audience for organic products in B.C. (Mackinnon, 2013). However this varies by market type and by region. As indicated on the previous page, certification is less important to Farmers Market consumers. In the Robson Valley many farmers have given up organic certification because they do not find it is worth the cost of maintaining, but they maintain the same growing standards and rely on “natural” branding (Thorne, 2021).

Figure 20: Influences of food claims on purchase



Source: Mackinnon, 2013

Households with children under two are the highest buyers of organic groceries by household type (75%), followed by those with children aged 2-17 (70%) and then households without children (65%). There is a strong linkage between organic consumption and university-educated, urban, and older working age consumers: between 73-79% of consumers falling into these demographics buy organic products every week. Households earning over \$100,000 annually are strongly correlated to these same demographics above and are also high purchasers of organic food. In B.C., ethnicity is also linked to organic purchasing: 74% of consumers self-identifying as non-Caucasian buy organics weekly, compared to 64% for the Caucasian population. (Mackinnon, 2013).

To translate this information to the Robson Valley consumer context, one metric to consider is average household income. Robson Valley average household income is substantially below the B.C average (\$56,148 in the Robson Valley after tax compared to \$75,209 for B.C. in 2015). This could indicate a lower-than-average ability or willingness to pay a premium for organic products. With respect to the metrics pertaining to age of children and no children households, according to 2015 data, there were 210 children between 0-14 in the RV and only 65 children from 0-4. This means that children under two and those 2-14 make up only 13% of the total

population, slightly lower than the B.C. average of 15% for this same age group. 310 households in the RV had no children out of 510 total households (61%). This is higher than the B.C. average data in the same period of 52% no children households. In the Robson Valley there were 195 people with university degrees in 2015, 12% of the total sample. This is lower than the B.C. average of 25%. No children households could be a potential market for consumption of organic products, but it is difficult to say whether this characteristic would counter the other factors outlined which determine willingness to pay (Statistics Canada, 2016).

Beef Consumers

A recent B.C. Beef Consumer study describes consumer interest in B.C. Beef and willingness to pay for certain quality-enhancing features. B.C. residents who consume beef express strong interest in buying beef raised in B.C. There are no significant differences identified by gender or age. Consumers believe that by buying B.C. beef they are supporting the local economy and taking part in a more environmentally friendly transaction (due to the shorter travel distance and a lower carbon footprint). Local food is also linked positively to freshness by consumers, which is a very important characteristic (People Talking Market Research Service, 2019).

Cost of local beef is the biggest barrier to purchase, cited by nearly one-quarter of B.C. beef buyers. However, 3-in-10 study group participants also demonstrate willingness to pay a 25% premium over the average cost to obtain each special feature or benefit (local, sustainable etc.). About half of study respondents (53%) would pay more for a product that was “beef raised in B.C. by a local producers cooperative you trust”, with their average expectation being a 13.3% premium. In another scenario, which add the benefits of certified environmentally sustainable and certified animal welfare standards to the aforementioned local standard, 55% would be willing to pay more for these benefits, at an average 14.2% premium (People Talking Market Research Service, 2019).

Lower than average household income in the RV (compared to B.C average) could indicate a lower than average ability or willingness to pay a premium for local beef (Statistics Canada, 2016). It would also be important to consider whether local customers interested in B.C. Beef are already accessing this through Class D and E license holders. In short, larger and wealthier markets outside of the Robson Valley should be the focus for marketing premium meat.

8.0 Gaps

8.1 Gaps Ranking Criteria/Methodology

This section ranks and summarizes key gaps identified in this report from background research, interview results and survey results. Gaps are defined as a challenge identified in the report with no clear matching local asset/resource to resolve or address it. Gaps that were only

mentioned in broader, B.C.-wide research without substantiation from the survey or interviews are omitted. Gaps and challenges originating from interview and survey results are weighted more strongly since these were the most current and local sources of information gathered. Gaps are rated qualitatively using a set of criteria below and then ranked according to their overall score. Methodology for prioritizing challenges and gaps was presented at Project Meeting #3 for discussion and then refined accordingly.

Criteria

Gaps and challenges are prioritized based upon the 3 following criteria.

1. Breadth and intensity: defined by how many production types and scales of production are affected
2. Complexity and cost: defined by how many parties, jurisdictions, and/or Ministries are expected to be involved in potential solutions
3. Urgency: how timely or time sensitive the issue is, as well as how current and top of mind it is for producers

Scoring

In Table 14, Gaps are scored against these 3 criteria on a scale from 1-3, and the score for each gap is then totaled for an overall ranking. The scoring was completed qualitatively by the project consultant and should be revisited with producers in a virtual or in-person focus group for ground-truthing, since this step was not possible during the life of the project due to COVID-19 restrictions. Table 14, and this scoring/ranking methodology could be used to revisit identified gaps periodically in the future.

For criteria 1, breadth and intensity, a score of 1 indicates that this issue affects only 1 agricultural sub-sector (e.g. only livestock, or only horticultural crops) and a score of 3 would indicate that this gap affects 3 or more sub-sectors (e.g. livestock, horticulture, mixed farms, and/or processing).

For criteria 2, complexity and cost, a score of 1 indicates that only 1- or a small number – of parties or agencies would need to be involved in implementing a solution (or part of a solution). A higher score indicates that multiple (3 or more) jurisdictions or silos would need to work together to implement a solution.

For criteria 3, urgency, a lower score indicates that there is no immediate crop/livestock loss associated with delayed action, or no anticipated immediate loss of land or livelihood. For example, lack of storage infrastructure is a lost opportunity because crops cannot be stored for sale later in the season, but that also means that these storage crops are not currently being grown for storage volumes. There is currently no rotting crop from not having this infrastructure yet. A higher score indicates that inaction could have near-term consequences. A higher score indicates an issue that is currently resulting in economic hardship or was emphasized as urgent throughout the research.

Categories

Gaps are organized according to the following categories

- Natural
- Infrastructure
- Knowledge
- Human
- Policy and Regulatory
- Financial
- Marketing and Distribution

8.2 Key Gaps

Table 14: Summary of Gaps

<i>Category</i>	<i>Gaps</i>	<i>Breadth/ intensity (1-3)</i>	<i>Complexity (1-3)</i>	<i>Urgency (1-3)</i>	<i>Score</i>	<i>Information source</i>
Marketing and Distribution	Consistent/adequate volume of supply	3	3	2	8	Interviews, background review
	Lack of local market	3	2	1	6	Survey, Background review
	Aligning with consumer values/ transitioning to higher value channels	2	2	2	6	
	Low access to wholesale/distribution markets	3	2	1	6	Survey, interview, background review
	Low involvement in Agri-Tourism	1	1	1	3	Survey
Infrastructure	Lack of distribution/transportation infrastructure	3	3	3	9	Interviews, survey, background review
	Lack of abbatoirs (especially Class A and B)	2	3	3	8	Survey, interviews, background review
	Lack of equipment	3	1	2	6	Survey
	Lack of storage infrastructure	2	3	1	6	Survey, interviews
	Lack of processing infrastructure (including for packing and grading)	1	2	1	4	Survey
Human	Age of farmers (succession planning and mentorship)	3	3	2	8	Survey, background review B.C wide issue
	Lack of labour (skilled farm labour)	3	3	1	7	Survey
	Worker accommodation	3	2	1	6	Survey, background review, B.C wide issue
	Lack of collaboration for farm/ranching industry to work together	3	1	1	5	Survey

	Part-time farmers	1	2	1	4	Survey, Census
Natural	Growing season/northern climate	3	3	1	7	Survey, interviews
Financial	Cost of production/ profit margins (including small economies of scale)	3	3	3	9	Survey, interview, background review
	Lack of investment capital/ financing	3	1	1	5	Survey
Policy and Regulatory	Support with policy and regulatory barriers	3	3	2	8	Survey
Knowledge	Lack of information/ uncertainty about the process of connecting with markets	1	1	1	3	Survey

PART 2: MARKET TRENDS AND OPPORTUNITIES

9.0 Market Growth and Competition

9.1 Competition

Competition for Robson Valley farmers differs depending on the market. This section contains a brief description of competition in local markets, regional markets and provincial markets.

Local markets

Competition from within the valley is coming from other neighbouring farmers. According to 2016 direct sales census data, there were 23 farms in area H Robson Valley/Canoe reporting direct sales, 22 from area A Salmon River-Lakes, 39 from area C Chilako River-Nechako and 18 from area D Tabor Lake-Stone Creek. There is equivalent scale of agriculture in other parts of the Regional Districts. The majority of these farms use farm gate sales, stands, kiosk, U-pick (19 area H, 20 area A, 35 area C, 19 area D) and fewer farms are competing at Farmers Markets (8 area H, 5 area A, 5 area C, 5 area D). For more information see Appendix 10: direct sales within region (Statistics Canada, 2016).

Regional markets

Regionally, Robson Valley producers are competing with small to medium growers in adjacent B.C. regions: the Cariboo to the west, Thompson -Nicola and Columbia Shuswap to the south. To provide an idea of scale, in the Cariboo, 337 farms report direct sales, 300 of these report farm gate sales, stands, kiosk, U-pick, and report 75 report sales at Farmers Markets (Statistics Canada, 2016).

Each of these adjacent regions has their own strengths and competitive advantages, and are assumed to be serving their local Farmers Markets and local retail. The Cariboo has a strong ranching history, ample crown range, and is located much closer to an auction. The Thompson-Nicola and Columbia Shuswap regions may have the advantage of being further south, and closer to infrastructure in the Okanagan. For the most part, any Farmers Market that is part of the BCFMA will have criteria limiting vendors to a certain geographic area of around 100-150 km from the market (Bonnor, 2021). Other markets may have more distinct geographic criteria, such as the Prince George market which limits vendors to School District 57 (which includes the Robson Valley), west to Fort Fraser and South to Williams Lake” (Farmers Market Prince George, 2019).

Robson Valley producers are also competing with farmers in Alberta that are serving the Jasper market and other Albertan centres. There are many Hutterite farmers in Alberta across the border and a good produce network, which is strong competition for the RV. For example, the B.C. Fruit Truck (serving parts of Alberta, parts of the Cariboo and Valemount) sources their beets, pickling cucumbers, corn and garlic from Hutterite farms (Deuling, 2021). Anecdotally,

farmers are competing with other farms within the region for slaughter capacity/availability and local market share (Edwards, 2021).

Provincial markets

In accessing larger-scale markets (wholesalers, retail chains) and parts of the province further afield, Robson Valley producers are competing with B.C.'s main growing regions: the Fraser Valley, the Okanagan and Delta. These locations have the advantage of a warmer climate, longer growing season, and much more infrastructure (both physical, social and knowledge infrastructure) to support the agriculture sector. These regions are also located closer to major markets (Vancouver, Kelowna) and are able to achieve economies of scale. When asked in an interview "what products (if any) are unavailable, and you would like to carry them if you could source them locally?" One respondent responsible for purchasing answered that there is nothing that he lacks which can be grown in B.C. Between the Okanagan, the Fraser Valley and greenhouses in Delta, the company he works for is able to switch over almost entirely to B.C. product during the growing season (Usher, 2021).

Of course, all B.C. producers are also competing with cheap imports and products from warm regions like California and Mexico.

9.2 2020/2021 Market Trends

"I feel that people are looking and are more aware of the quality of local produce and are aware of supporting local farmers Just the garlic, they know whose it is, where it comes from and that's what they want. They don't want grocery store stuff. Yes, people will pay for good quality food." (Store owner, Robson Valley)

This section summarizes recent provincial, national and global trends connected to all parts of the food system, with an emphasis on trends that might be of interest to Robson Valley producers. Food trend reports were reviewed from 2020 and prior, as well as forward looking reports making predictions of what will be lasting trends post-pandemic. COVID-19 has caused economic volatility in global markets and presented rapidly changing circumstances and disruptions to the agri-food supply chain. It has also changed consumer habits and preferences, and only time will tell which of these habits will remain post-pandemic (Charlebois et al., 2021). The Nourish report states that "many existing trends accelerated during the pandemic, and several new ones emerged." (Nourish Network, 2021). This review of online literature (mainly national and global in scope) was complemented by a wealth of input from B.C.-focused targeted interview responses to questions about recent trends and expected trends.

In early 2021, economists are speaking of the polarization of Canada, and a "K-shaped recovery", where some segments of the population have additional spending for food, as they have shifted disposable income from entertainment and travel budgets into food spending,

whereas other are struggling and are spending less than ever on food. Slightly more than half (51%) of Canadians say they have less money available to spend on food today than they did before COVID. Not only have some people shifted use of funds, but workers who maintained their employment also have additional discretionary funds due to reduced spending on childcare, commuting and food & beverage outside the home. This polarization of income and food spending is expected to continue beyond the end of the pandemic, while some will need to catch up on debt, and others are will be keen to spend once restrictions are lifted (Nourish Network, 2021).

One thing is undebatable in the literature, increased time at home results in an increased focus on food. 77% of Canadians agree or strongly agree with the statement, “Food and eating are important ways I stay entertained during the pandemic” (Nourish Network, 2021).

Six key trends discussed in this section are: health and wellness, trust/quality of food, identity and community, local food/ food security, direct to consumer and ethical/sustainable food and packaging.

1. Health and Wellness

During 2020 there was a strong consumer focus on health and wellness and new definitions of health food. One report refers to: rituals for food preparation, functional foods and a more serious commitments to reduce the health risk associated with unhealthy eating post-pandemic (Mintel, 2021). However, consumers will also want more validations and proof of mental/emotional health ingredients (Mintel, 2021).

Functional foods

With an expanded definition of health and wellness, the lines between supplements/herbal medicine and grocery are becoming blurred. Products like superfoods, probiotics, broths, and sauerkrauts are more than health foods and are strongly linked to health and wellness claims and lifestyles. Functional foods are trending and include food with medicines in them such as: cannabis, eutrophics, ingredients that deal anxiety and with immunity. People are commonly searching for products related to immunity with vitamin C, magnesium and vitamin D (Nourish Network, 2021).

There is a growing interest in eating for resiliency & preventative healthcare. Over half of consumers use functional food (58%) or beverages (56%) to treat a specific condition, including general prevention efforts (Nourish Network, 2021). Reacting to the pandemic, 35% of consumers are doing more to proactively take care of their physical and emotional health now versus pre-COVID.

Keto/ low-carb

Pre-pandemic the keto diet and low carb diet was a major trend. At the time of the Nourish 2020 trend report 26% of Canadians had either adopted, tried, or considered trying keto in the past 18 months. Keto may be positioned to become the next gluten free. Meat and produce producers may be able to capitalize on this (Nourish Network, 2020).

Produce

Consumption of produce in B.C (with long standing known health benefits) has been growing and continues to grow, interview respondents verified that produce sales are up every year (Usher, 2021). Demand for organics has stayed pretty steady throughout the pandemic (Bregg, 2021).

2. Trust and Quality of Food

Consumer trend reports predict new definitions for trust in food and in quality and essential food. Post-pandemic people will focus on getting the best value for money and transparency will be important about a product's price, ingredients, processes and labour ethics.

Value for Money

This focus on getting the best value for money may be exacerbated by food price inflation. The 2021 food price report states the food prices will be affected by the pandemic and climate change, resulting in food inflation at up to 5% (Charlebois et al., 2021).

Safety and Hygiene

The pandemic will leave a legacy for safety and hygiene in retail and foodservice. (Mintel, 2021). Consumers will want radical transparency & full disclosure in part due to a new awareness of our food system. News articles in the last year about meat processing plants, shut-downs and food shortages have increased food system awareness. Typically, Canadians have a high or neutral level of trust in farmers and the food system, but will still seek new levels of transparency (Nourish Network, 2021).

Real Food

A trend of re-defining "real" food identified in 2020 will continue. There has been a decline in purchase of processed foods and an active discussion of the drawbacks of "ultra processed foods (UPFs)" and engineered proteins (Nourish Network, 2020).

There is a related opportunity for B.C producers. According to the B.C. Agrifood and Seafood Domestic Consumption Study (2018), B.C. products address some of the main concerns residents have when buying food products; they are perceived to be fresher, healthier and safer than products coming from elsewhere, and they address residents' interest in supporting the local economy (Advanis, 2018). Six in ten Canadians say they trust food produced in Canada

more than they do food grown or made elsewhere, a trend on the rise since 2017 (Nourish Network, 2020).

There is an opportunity for farmers to use tools at their disposal (e.g. commodity organizations, and social media) to help consumers learn about what they do.

3. Identity and community

During the pandemic food's link to identity and community has been strong. Consumers' understanding of community has been strengthened by Covid-19. Products, companies and eating experience should seek to create new ways for consumers to connect with other consumers and look for opportunities to solidify food and drink as a key part of someone's identity. Larger brands do this by creating online communities based around their product (Mintel, 2021)

Family meal-time

Covid has caused the return of family meal-time, with breakfast, lunch and dinner consumed at home more often. Canadians are skipping fewer meals and 85% are planning to continue to eat family meals together post-pandemic (Nourish Network, 2021).

In first wave of the pandemic a study carried out by the University of Guelph examined whether Canadians' eating habits had changed since staying home. At the time, results showed that 60% reported making more meals from scratch, 70% spent more time cooking, 55% ate more meals with children and 50% involved their children in meal preparation more often (Charlebois et al., 2021). However, since this time, cooking fatigue has settled in and these statistics have no doubt shifted.

4. Local food/food security

“Remember, we were there for you when the grocery store and big supply chains weren’t”
(Banwell, 2021).

According the B.C. Agrifood and Seafood Domestic Consumption Study (2018) there is a strong potential to grow the resident market for B.C. food products (Advanis, 2018). This is triangulated by market research sources, and interview data. Almost all interview respondents noted the strong demand for local B.C (or Canadian) product. Clearly, interest in local food has been a trend long before the inception of COVID-19. Both the pandemic and climate change impacts (e.g., California wildfires) have served as strong reminders of the importance of alternatives to food imports. The Nourish 2020 report discussed how “farming is getting closer to the consumer”. This is a reference to things like urban farms, and small farms supplying their immediate area. People are increasingly non-rural, and consuming local food is a way for them to connect to the rural. 58% of Canadians say that they are more likely to buy Canadian made

or grown than before pandemic (Nourish Network, 2020 and 2021). A recent study also shows that 4 in 5 Canadians claim they're willing to pay extra for locally grown produce (Charlebois et al., 2021).

Spray Creek Ranch in Lillooet reports that March and April 2020 were their best sales months ever. At this time everything was in short supply, people were panic buying there were failures in grocery chains and packing plants and global supply chain issues. However, at the farm level, nothing changed and they could meet demand easily. They got new customers and are now trying retain these customers (Banwell, 2021).

Hope Farms reports preparing small amounts of bulk sales in summer 2020. It all sold like crazy because people were getting into canning and food processing. (Hope Farms). Up until Covid, people were getting away from heartier products: potatoes, onions, rutabagas, squash. However, with consumers wanting to stockpile and eat locally, one farmer reports increased sales of these products in 2020 (Whitticase, 2021).

5. Direct to consumer

Consumer interest in local food doesn't end there, consumers are also interested in buying this local food directly from the farmer. According to a Nova Scotia based study, consumers have developed new direct relationships with producers and craft brands during the pandemic, using direct to consumer channels with shorter supply chains. Close to 5% of Canadians purchased directly from farmers during the pandemic to date and plan to continue this behaviour after the pandemic (Charlebois et al, 2021). This is connected to a trend identified pre-2020 of consumers wanting to know more about modern farming practices and commentary above regarding trust and quality of food (Nourish Network, 2020).

"Demand has been through the roof for a lot of growers since the beginning of the pandemic" (Bodnar, 2021).

6. Ethical and sustainable food/packaging

Demand for ethical and sustainable foods is growing, encompassing demand for sustainable packaging as well. Ethical and sustainable refer to the environmental footprint of the food as well as labour standards.

Environmental impact-based eating

The concept of environmental impact-based eating is growing. Environmental impact-based eating considers the carbon footprint of food (emissions directly from production and also from land use change (Nourish Network, 2020). There are examples of US restaurant chains that let you calculate the impact of your meal with an app/calculator that looks at carbon emissions, water saved, soil health and organic land supported through one's meal. The concept of regenerative agriculture is becoming more known,

and the concept of carbon sequestrations in soils. Trend reports indicate that some sort of regenerative agriculture certification could be coming (Nourish Network, 2021).

Grasslands/ranching holds great carbon sequestration potential; the environmental benefits of grasslands is even being promoted through a recent A&W grass-fed beef campaign. The chain has now switched to 100% Canadian grass-fed beef for the benefit of soil health and preservation and are paying a premium price for grass-fed beef.

Plant-based foods

The mainstreaming of plant-based foods and beverages is part of the ethical/sustainable food trend (Nourish Network, 2021). Plant-based dietary decisions are motivated by growing knowledge of the impact of global food production, industrial meat production in particular, on the environment. The official Canada Food Guide now encourages plant-based food substitutes for a more sustainable food system (Charlebois et al., 2021). One interview respondent also noted that produce has come to forefront in lieu of meat.

Sustainable packaging

Single-use plastics became more popular for hygiene and safety during the pandemic, but consumers will want alternative strategies over recycling post-pandemic, including things like edible packaging (Nourish Network, 2021). Pre-pandemic the Liberal government was positioned to move forward with a national ban on single-use plastics, and this should resume in 2021. The single-use plastics included in the ban are grocery checkout bags, straws, stir sticks, six-pack rings, plastic cutlery and food takeout containers made from hard-to-recycle plastics.

Social Justice

There is increased awareness about social justice in the food industry and that “burden of risk in getting food to stores and to our tables is frequently borne by those with less privilege and, in some cases, fewer rights” (Nourish Network, 2021).

9.3 Beyond COVID -19

Post-pandemic the trends outlined in section 9.2 in consumer food demand are expected to continue. There may be small changes to consumer tastes, for example there is an expected shift away from comfort foods that are eaten at home during the pandemic and a renewed interest in more innovative foods (Nourish Network, 2021), but for the most part these trends are a continuation of pre-pandemic shifts in demand. However, what will change, or change back, are some of the ways that consumers obtain their food.

Food retail/foodservice ratio

During the pandemic there was a shift from foodservice to grocery. Before the pandemic, the food retail/foodservice ratio stood at 62/38 and restaurant sales had increased every year for

the past 25 years (Charlebois et al, 2021). Monthly food retail sales in Canada were approximately \$7.7 billion, versus \$5.3 billion for food service.

In May 2020, the last month before restaurants started to re-open, the ratio shifted to a whopping 91/9, with food retail generating \$7.8 billion in sales in May 2020 versus \$891 million in food service. At time of food price report publication (end 2020) the ratio was back to approximately 74/26 (Charlebois et al, 2021). It is anticipated that some of this shift will remain, as it is anticipated that employees may go back to the office 2-3 times a week, rather than full time (Nourish Network, 2021).

Online shopping

Before Covid, emerging channels for food sales were convenience stores, subscription services, delivery services and e-commerce. From 2019 to 2020 there was already a 7% growth in online grocery shopping (Nourish Network, 2020).

With the exception of convenience stores, the pandemic has accelerated market share of these channels. Some of this shift will stick, some will not. Meal kits have exploded during COVID and these companies have now cemented themselves into the industry (GM). People are doing bigger shops less often. There is also a split between shoppers who place an online grocery order once a week or more often (47%) to replace their regular in-store shop and those that do so monthly or more infrequently (53%) to supplement their in-person trips for specialty or bulky items. E-commerce has also grown on the production side; producers are buying inputs and selling product through online platforms more commonly.

Only 59% of Canadians claim they will continue to shop online for groceries post-pandemic as 84% enjoy the experience of shopping for groceries in-person more than online (Nourish Network, 2021). A hybrid shopping mode is anticipated, consumers might buy bulky necessities online and shop in-store for fresh and new products. People will also expect more and more sophisticated online platforms with more advanced searchability (Nourish Network, 2021).

Delivery/ Take Out

Grocery delivery and takeout were growing pre-pandemic, primarily driven by younger generations, and these are the workers who are most likely to continue working from home, so there is reason to believe these trends will continue. A pandemic adaption to this trend are family sized meal kits and family sized take out portions (Nourish Network, 2021). Older and immune-compromised individuals will continue to be hesitant to dine out, and for other reasons, take-out and delivery are here to stay (Nourish Network, 2021).

10.0 Opportunities

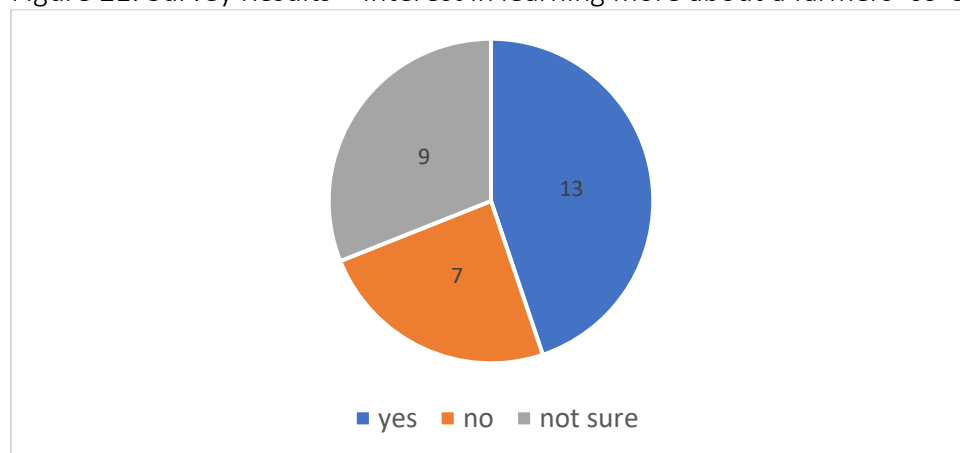
10.1 Survey Results

The survey design included a few questions to understand where Robson Valley producers' key interests lie in terms of expanding production. Survey respondents were asked if they produce a particular product/crop/food that they would like to produce/sell more of. Out of 36 respondents, 20 produce something they would like to sell more of. When asked to specify which crop, common responses were hay (presumably to expand their livestock production), meat and berries.

Other questions gauged RV producers' interest in training sessions. Just over half (15 out of 29) had previously participated in business or marketing training. Training previously accessed included Community Futures farm business training, bookkeeping courses, a business degree and other college courses. 20 out of 29 respondents (69%) are interested in participating in future business or marketing training.

Potential benefits of farmer's co-operatives, or collectives for activities such as: joint supply planning, bulk purchasing, marketing, distribution, sales, and sharing equipment, has been raised in previous research, and the survey intended to explore this idea further with local producers. When asked if they are interested in learning more about the advantages and disadvantages of being part of a farmer's co-operative group 22 out of 29 respondents indicated either "yes" or "not sure" (Figure 21). Some respondents may already be part of local farmers' co-op in the Valley.

Figure 21: Survey Results – Interest in learning more about a farmers' co-operative



Given the moderate degree of interest, information could be provided and discussions could be facilitated among Robson Valley producers. Detailed responses describe interest in:

- Renting farm equipment when needed, or renting processing equipment or space

- Interested in a sheep cooperative or shipping organization or arrangement.
- Cooperative purchasing of farm supplies.
- Pooling harvest equipment and labour.

Concerns and challenges described were:

- Inequitable distribution of effort among co-op members.
- Clear strategy and equitable distribution of effort for equipment maintenance and repair.
- Potential difficulty accessing co-op machinery in most advantageous weather window, when everyone needs access at the same time.
- Not seen as a long-term functional business model. Prefer a simple model of contracting another farmer to grow a certain crop.

10.2 Opportunities by Market Type

Farmers Markets

A partial review was completed of 2020 vendor lists from a small sample of 5 local and regional markets in order to attempt to determine any product gaps. Vendor lists available online, or via Facebook, or via email correspondence, included: McBride, Valemount, Hinton, Prince George and Quesnel. Since the vendor lists change frequently for the smaller markets, it can be difficult to identify a gap in product offerings. Nonetheless, based on this preliminary research, vendors selling meat and eggs are missing from the smaller markets. Other nearby markets have gaps in baked goods, fruit and value-added products like soaps/cosmetics/herbal products, wine/beer/cider, canned goods/preserves. Interested producers would need to contact markets of interest to obtain more information on these potential gaps and to determine if these represent a trend, or were just gaps in a specific year. See Appendix 11 for a full summary.

Local grocery

Retailers indicated an interest in carrying local produce, if they do not already have a local source of a specific vegetable. Interest was also expressed in carrying local grain, more “shelf stable” vegetables (like broccoli or root vegetable as opposed to leafy greens) and a consistent source of local honey. Some local retailers were interested in carrying local meat, but indicated they would have to change their insurance coverage to do so.

Regional/provincial grocery

Based on targeted interviews completed, grocery chains are looking for items they don’t currently offer that are local, or local products that are available earlier or later than their current suppliers, or superior items (e.g. better flavour) to replace an item that is currently carried. Specific trends and opportunities as they relate to each food group are described

below. Specific fruits, vegetables, animal products and value-added products that were flagged in interviews as opportunities are also listed in each section in order of importance.

10.3 Opportunities by Food Group

Produce

Market opportunities mentioned most frequently in a The Opportunities Assessment for B.C. Vegetable Sector (2012) were demand for local food, improving the quality of B.C. vegetables, new production techniques and ethnic products. Conversely, purchasers also stated that some of their best suppliers are located in B.C. In one case, a purchaser was quoted to say that B.C. had, “the best out of hundreds of suppliers located across the country and producing a wide range of vegetables!” (Gooch et al, 2012). In 2012, the study found that B.C.’s vegetable industry had enormous potential; and that domestic market opportunities exceed the present industry’s ability to supply by a considerable amount (Gooch et al, 2012).

This is still the case, as in 2020 B.C. production accounted for almost 50% of potato consumption and only 34% of other vegetables. Excluding potatoes, B.C. is heavily dependent on international imports of vegetables which account for approximately 63% of total consumption of vegetables (Davies Transportation Consulting Ltd., 2020).

Targeted interviews as a part of this project in 2021 with food system stakeholders identified the following opportunities and made the following observations.

Fruit and Berries

- Fruits are the higher value form of produce, but for volume of production in RV hoop houses or greenhouses are necessary.
- There is more work all the time on berry production around the world. There could be an early variety of blueberry appropriate for a hoop house in the RV, but trials are needed.
- Albertans have a pretty good produce network, especially with the local Hutterite network, however they don’t have a source, which is why this is a location for the B.C. Fruit Truck (Deuling, 2021).
- There are opportunities for any fruit that will hold in a cooler for 5 days or more.
- There is opportunity for any fruit that the Hutterite and Albertan vegetable farmers do not produce
- Any berries, fresh or frozen
- Raspberries
- Unique fruits like gooseberries. However, newer/novel items (such as haskaps) would need a massive marketing campaign as there is not a lot of interest in it from consumers. Georgia Main Food Group tried carrying haskaps in 2020, however they didn’t travel well and were rejected on delivery.
- Strawberries

- People love berries and fruit. Anything you can do to extend season is valuable, or to save product when bad weather is coming.

Vegetables

- Garlic was often mentioned as a valuable and high demand crop. However, some buyers have been carrying local garlic for a long time and are now saturated as many farmers have begun to grow it.
- Tomatoes have potential, but the demand is volatile year to year.
- Other trends could be opportunities like specialized local ginger.
- Local asparagus is always in high demand.
- Early season local greens, and greens in general are high value and sell in high volumes.
- Pumpkins; retail always comes up short in the fall.
- Grocers can accommodate more supply of broccoli, cauliflower and celery. However, it is also challenging to meet price pressures from large farms in U.S and there is a lot of risks with diseases if you don't have the land for these high-volume crops.
- Carrots, cucumbers, potatoes and tomatoes. These are common staples that people cook with and are always in demand.

Market opportunities based on the timing of availability of certain products were flagged as equally or more important than the crop itself. Season extension and storage were repeatedly flagged through the background review and targeted interviews as an important focus for the Robson Valley. The following comments come directly from the RVMOA interviews:

- There is high potential in winter and shoulder season sales.
- One purchaser reported paying top price to a farmer stored garlic to provide it out of season.
- In a short growing season, you need to maximize your productivity in the field during the season. Then put product into (shared) storage so you can ship through winter.
- Shoulder season product is where the economics are. E.g. zucchini, growers can get \$30 a case in shoulder, in peak (July and August) wholesale is down hugely, to \$10 or single digits. Therefore, Discovery Organics work with growers on season extension for their economics. There are a lot of crops that are like that. Season extension gives more food security. Methods are infrastructure for storage crops; and using hoops, tunnels for early crops e.g. radishes in April, early spinach.
- The B.C. Ministry of Agriculture small farm accelerator program ran this past December 2020, a lot of applications were for tunnels for growing, on -farm storage (coolers, freezers).
- For root crops, one needs to be able to store well through the winter, and ship on an ongoing basis. Root crops are low value, but they become more valuable post-Christmas when the Lower Mainland supply is low.

Meat/Poultry/Eggs

According to data provided by the Ministry of Agriculture, British Columbian consumer demand for some meat products is greater than what is produced locally, meaning that British Columbians also consume beef, pork and lamb products imported from other jurisdictions. For example, in 2013, British Columbians consumed 4.5 times more beef, 3.8 times more pork, and twice as much lamb than the amount produced in B.C. (Select Standing Committee on Agriculture, Fish and Food, 2019). Finishing beef locally for the local market returns 73% more value to the region than shipping liveweight beef for finishing elsewhere (Gunner and Watt, 2012).

Where the consumption of poultry is concerned, consumer statistics show that British Columbians only consumed 57% of the chicken produced by local farmers, and consumed 70% of the turkey by B.C. producers (Select Standing Committee on Agriculture, Fish and Food, 2019). Multiple sources report that consumers are always in search of more local eggs (Charlton, 2021. Bonner, 2021). While there are challenges to securing egg quota, production for sale at non-quota volumes could be an opportunity.

B.C. produces over 80% of its fluid milk requirements but imports over 70% of cheese and other processed milk products from other provinces. According to the B.C. Milk Marketing Board, the Fraser Valley (including Metro Vancouver and the Fraser Valley Regional District) accounted for 76% of milk production in 2018 (Davies Transportation Consulting Ltd., 2020). Obtaining milk quota is a substantial barrier, which probably outweighs opportunities in the RV for increasing the dairy sector.

More recent reports indicate that Canadian consumers are increasingly seeing meat as a luxury rather than a commodity, and often eat less but better quality or healthier meats (Nourish Network, 2021). Taste in types of meat consumed are evolving, Spray Creek Ranch reports that bones and organ meat are very popular and people have caught on to the health benefits of eating “nose to tail” (Banwell, 2021).

Relatively high requirements for manual labour and close physical working conditions common in meat processing facilities meant that the corona virus had the potential to spread quickly in these plants. With increased safety measures (e.g., physical distancing), processing plants were operating below regular capacity and efficiency during the worst part of the pandemic, and in some cases, whole plants faced shutdown (Charlebois et al., 2021). This begs the question whether this may present an opportunity for small -scale slaughter on farm, or regional abbatoirs to flourish since they may not have this same issue of many workers in close proximity.

Value Added

RVMOA survey results indicated that only 5 respondents out of 19 were interested in adding some form of value added (such as dehydrating, bottling, canning, yogurt or cheese-making etc.) to their operation. However, a lack of interest in the survey sample should not completely

eliminate consideration of value-added processing opportunities for Robson Valley production. The low-level of survey interest is likely due to the capital/infrastructure, regulatory, transportation/ distribution and marketing challenges rather than a complete lack of interest. The Small Scale Food Processor Association (SSFPA) Market Scoping Project (MSP) concludes that: the market conditions for people involved in producing and processing Agri-Food products for specialty markets in B.C. are very attractive. Their study considered both micro-processors²² and small processors (Community Venture Development Services, 2002).²³

The new products that processors will have the best success with are those that replace gourmet imported food, and with specialty foods that the large processors do not find economically viable to market in large quantities (Community Venture Development Services, 2002). To increase share of the domestic market Canadian specialty food manufacturers must improve service levels including: a better understanding of the customers' needs, improved management of the entire manufacturer/distributor interface (i.e. order fill, timeliness of delivery, handling of promotions) and more innovative products that meet distributors objectives (Community Venture Development Services, 2002).

Specific emerging processed goods which arose in the RVMOA research are plant-based proteins, grains, semi-processed vegetables and pet products.

- **Plant based proteins:** Plant-based proteins are a processed good with growing potential. Plant-based proteins far exceeded meat in terms of growth over the first seven months of 2020, at +129% over the same period in 2019. (Nourish Network, 2021).
- **Local grain:** Local grain was mentioned by the Dunster General store, and has been grown and marketed successfully in the past by a past RV farm. Oats and barley grow well in the Valley, but the barrier is the requirement for a mill and packaging facilities. (Charlton, 2021).
- **Semi-processed vegetables** (e.g. salad mixes, cut vegetables, cauliflower rice, zucchini pasta etc.): Pretty much most, if not all, of the semi-processed vegetables in B.C grocery stores comes from the United States. No one does vegetable processing locally, using local product, and there is a growing demand for this type of product (Usher, 2021). This would also require proper processing and packaging facilities, but there may be a small-scale or medium-scale version of this product.
- **Pet food:** There has been a trend of owning additional pets during the pandemic. Ben and Jerry's now features "doggy desserts". These are sold next to regular desserts in grocery stores. 13% of owners feed their dogs solely dog food, meaning that the remaining 87% buy grocery store, or specialty food items for dogs (Nourish Network,

²² Micro-processors have 1-2 FTEs and represent farm-based ventures.

²³ Small-scale food processors with between 3 and 25 FTEs are mainly marketing at commercial volumes from a regulated commercial kitchen, which may be on the farm or owned by processors who are not producers themselves.

2021). While producing a product on the scale of Ben and Jerry's is likely out of the question for the average producer in the Robson Valley, there may be an opportunity for meat producers to create a niche product with by-products or offal.

Organics

There is a high and growing demand for organic products. For example, Vancouver Island sales are growing 20% annually but still over 80% of organics sold is imported (Mackinnon, 2013). There is a clear market opportunity for organic meat and poultry, in particular, however, this sector arguably faces the greatest challenges of all organic products. Demand for organics did not wane during the pandemic, organics performance was up from March to September 2020, and supply struggled to keep up with demand (Nourish Network, 2021). This is an opportunity for producers wishing to pursue certification, (deemed important to the majority of B.C. consumers outside of Farmers Market shoppers see Figure 20).

10.4 Opportunities Ranking Criteria/Methodology

The following ranking criteria was presented at client meeting #3 for discussion, refined and then utilized to inform the limitations and recommendations presented in Section 10.5 and to determine the top five opportunities, and associated actions, presented in Section 10.6.

Ranking Criteria

1. Within scope of CF-FFG mandate/strategic vision and local partners economic development goals
2. Linked to available funding opportunities.
3. Anticipated to be valuable for the greatest number and scope of producers (across various farm scales and across various production types)
4. Easily actionable, well-defined and clear from the research
5. Essential for scaling up from hobby to production, or from small farm to medium.
6. First steps that can achieve early gains and set up for later work.
7. Sustainable for long-term success.

An opportunity ranking table made up of these criteria can be found in Appendix 12. CF-FFG could use this table to determine their course of action for implementing the opportunities and actions.

10.5 Limitations and Recommendations

Due to scope and time limitations, this project could not explore each and every potential market opportunity within the Robson Valley, the broader region, and across the province. In addition to recommending the 5 top opportunities (in the following section), this section presents a set of recommendations for future small market scoping projects to ensure no opportunities are left unexplored.

These recommendations and the proposed opportunities following in Section 10.6 need to be discussed and vetted with local producers in a focus group setting, or other interactive facilitated event. This normally would have been a part of the RVMOA but was not possible due to COVID-19 restrictions.

- 1) **Ground truth findings:** Hold a focus group for local producers and key partners to present report findings, recommendations and opportunities. At this session, gaps could be re-scored and opportunity ranking could be facilitated.
- 2) **Institutional purchasing:** Explore the potential of the institutional purchasing market within the Robson Valley as a small follow-up project.
- 3) **Agri-Tourism:** Explore Agri-Tourism as a small follow-up project. Tourism statistics/potential were not reviewed as a part of this project, nor were tourism stakeholders and potential partners engaged.²⁴
- 4) **Organic Production:** Confirm the current status of organic producers in the Robson Valley, their needs, and/or their information gaps. There is a high unmet demand for organics in B.C., and this demand/potential is growing. Meanwhile, there were only 4 certified organic producers in the Robson Valley at the time of the 2016 Census. The costs and benefits of certification were not specifically reviewed as a part of this project, nor was local producer interest in the certification process confirmed. The Certified Organic Association of B.C. has a wealth of resources and support information for the organic sector and interested producers, such as the Small Scale Certification Research Project and three business guides for making the switch to organic (Certified Organic Associations of B.C.). Follow up with local producers is recommended to confirm that they are not experiencing an information or support gap related to knowledge, or organic markets, or organic transition. Demand/potential for organics and for B.C. vegetables is enormous and is growing, particularly in retail/distribution markets (certification is less important to Farmers Market consumers)

²⁴ Lillooet agriculture and food society completed a feasibility study on Agri-Tourism which could serve as a good reference. In the East Kootenays, Fields Forward is also currently working on Agri-Tourism for the Creston area.

10.6 Top 5 Opportunities

The five opportunities proposed focus primarily on gaps and opportunities associated with marketing and distribution. However, since the 7 categories utilized throughout this report overlap and interact (see text box page 24), the opportunities also include actions that touch upon infrastructure and connect to other production-oriented challenges. It is important to note that these 5 opportunities are not exhaustive, and have been heavily filtered and prioritized through subjective ranking criteria (Section 10.4). This list does not fully address all of the various production challenges, financial challenges and succession challenges identified as important to local producers and local production, and there is much complementary work to be done by other partners and other governmental agricultural agencies.

The following proposed opportunities should be discussed and vetted with local producers in a focus group setting, or other interactive and facilitated event. This normally would have been a part of the RVMOA but was not possible due to COVID-19 restrictions. The top 5 opportunities identified are to:

- 1) Increase sales through existing direct local channels.
- 2) Increase regional/ extra-regional meat²⁵ sales and build red meat²⁶ value chain.
- 3) Capture increased market share of adjacent markets and wholesale channels.
- 4) Establish a broadened Robson Valley cooperative (co-op) or collective.
- 5) Conduct Robson Valley Specific Production Trials/ Product Research.

1) Increase sales through existing direct local channels (Farmers Markets, Box programs, U-Pick, local retail) to assist small and medium operations to scale up.

Description:

Small and medium-scale farmers are not able to supply larger markets due to numerous barriers described within this report. Supporting gradually increased sales through existing direct farm to consumer channels can support small and medium-scale farms to increase production levels to a point in which they can overcome obstacles. These activities aim to utilize channels that are already common and successful, and expand market share within these channels, to gradually build producer readiness, which is a proven way to scale up to other market types. Market trends and consumer information suggests that there is high potential to sell more local product in the Robson Valley and beyond. Land availability is not a pronounced barrier in the Robson Valley, so these actions focus on other supports to meet identified gaps.

Actions:

²⁵ All types of meat.

²⁶ Red meat includes: beef, lamb and bison.

1.1 Further evaluate and ground truth vendor gaps in nearby Farmers Markets

- Identify product gaps or missing products
- Support RV producers to experiment with secondary products and diversify what they are bringing to markets
- This action connects to Opportunity #4 because a collective or cooperative model would allow RV Farmers to reach broader markets and save time.

1.2 Connect with tourism sector and foster Agri-Tourism for farm exposure

- There is currently a strong interest in Agri-Tourism locally and low involvement.
- People are staying closer to home during the pandemic and travelling regionally/intra-regionally.

1.3 Coordinate “meet your maker/ meat your produce manager” events

- Local retailers and the chef contacted have shown interest in sourcing local products.
- Further discussion with local retail, foodservice (heli-chef, high-end restaurants) and directly with local produce purchasers should be facilitated directly with producers.
- These events have proved to be successful in other parts of B.C and led to new direct relationships and increased regional sales in the Beyond the Market project.

1.4 Increase box program and delivery sales channels through e-commerce training and support

- These channels are already strong.
- Support with setting up or improving e-commerce could amplify these channels or streamline their efficiencies.

2) Increase regional/ extra-regional meat sales and build red meat value chain

Description: Livestock ranching and hay/forage production are prominent in the Robson Valley and it is important to support expansion of hay/forage production to meet local feed needs in years with low hay production and/or increase herd size to reach new markets. Increasing hay production is also an insurance policy against risks from climate change and wildfire.

Consumers will pay a premium for special beef but interest for RV local consumers is unknown. Larger and wealthier markets outside of the Robson Valley should be the focus for marketing premium meat, but activities can be undertaken to simultaneously build local markets. Lack of slaughter capacity and associated issues were ranked as a major gap in this study.

Actions:

2.1 Complete a Regional abbatoir feasibility study

- Complete a review and interviews regarding the Salt Spring Island Regional abbatoir, the Robson Valley mobile abbatoir and the Port Alberni abbatoir as a first step.
- Complete a feasibility study/ cost-benefit analysis for a Robson Valley regional abbatoir.
- The time is ripe for small-scale meat production due to closures of larger plants and news articles raising awareness of shortcomings of industrial meat production.

2.2 Coordinate an information session related to grass-fed/ locally finished red meat and certification options

- Engage a small number of producers (through interviews or a small focus group) to define the sectors' primary information gaps.
 - Do producers want help marketing grass-fed meat?
 - Does the livestock sector in general need support in increasing their direct sales vs. commodity sales?
 - Are producers aware of branding and certification programs/ opportunities through the B.C. Cattlemen's Association/ B.C. Beef Producers (including Verified Beef Production Plus and Genuine B.C. Beef Branding)?
- Coordinate experts in the field, including successful grass-finished producers, to speak with RV producers and provide information.
- Source and distribute a simple cost/benefit and market analysis of conventional vs. grass-finished red meat.
- This action is connected to 1.3

3) Capture increased market share of adjacent markets and wholesale channels

Description: Few farmers from the RV, likely only a small sample, sell to wholesalers/distributors or grocery retail as a primary, secondary or tertiary component of overall sales. This represents a massive opportunity if quality, volumes and criteria can be met to provide extra-regional and urban markets with Robson Valley products. This set of actions is designed to make use of existing supply chain infrastructure (existing processors/distributors and transportation services) rather than creating a parallel infrastructure system (such as creating a physical food hub). These actions rely on creating partnerships and collaborating with existing physical supply chain infrastructure rather than attempting to create and/or invest capital in developing new infrastructure which would need to be financed through grants. These actions aim to begin to shift the ratio of RV sales channels to see more farms and ranches selling bulk sales. Scaling up first requires increasing sales through local/existing channels

(Opportunity 1), to the point where a threshold is reached.

The trends documented in this report should be leveraged to promote RV products (i.e. local food, direct to consumer, ethical foods, environmental impact based eating, re-generative farming, grassland stewardship/carbon, growing produce consumption, trust in farmers).

Actions:

- 3.1 Group training to meet wholesaler requirements (e.g. food safety system, packing and grading etc.)
 - B.C. Ministry of Agriculture resources (fact sheets and webinars) on these topics could be shared directly with Robson Valley producers through in-person training.
 - Existing materials could be edited to be catered to a small farm context.
 - In-field training at a small or medium farm that has its GAP certification and associated systems in place would be the most effective.
- 3.2 Establish CF-FFFG/agricultural marketing liaison and marketing support role
 - This role would serve a food broker role but would be fully subsidized, rather than obtaining a profit margin.
 - This role would serve as a marketing/communications role for medium-scale farmers ready for larger markets and would facilitate their connection to retail/distribution.
 - This role could work one-on-one with producers and help them troubleshoot/plan
 - This role could also explore the feasibility of a regional brand or regional marketing, or even facilitate joint marketing initiatives between 2 or more producers.
 - This role would need to be filled by an agricultural and marketing expert to be effective.
- 3.3 CF-FFG led value chain establishment
 - This activity is tied closely to 4.1 and 5.2.
 - CF-FFG would bear the labour cost of establishing a value chain around a certain product.
 - CF-FFG would negotiate and administer the value chain/vertical coordination arrangements.

Value Chain Establishment

A 2019 report produced for the B.C. Ministry of Agriculture describes best practices in establishing and coordinating value chains, and differentiates between how this can be facilitated by a government, non-profit or private sector leader. The first step is to identify an opportunity or challenge, and prove demand for a certain product. Typically, the proposed product is innovative and “on trend”. The second and third steps are to source appropriate partners and capabilities and to provide a platform for producers/processors to obtain funding for development of product solutions. These two steps include things like reaching sufficient scale to support a distributor SKU, typically a locally grown product, meets the operator’s food safety and inspection requirements; and sufficient resources, knowledge, plant, equipment and raw materials to produce the required supply of the product and finally to design and implement the product solution (FS Strategy Inc., 2019).

4) Establish a broadened Robson Valley cooperative (co-op) or collective

Description: The advantages to working together as a legal cooperative or some other form of producer collective apply to many aspects of production, marketing and distribution. Co-ops or other collective arrangements were frequently referenced through the RVMOA research as a way to meet supply demands for larger buyers while also collaborating to meet quality, packing and food safety requirements. Cooperatives/collectives can choose to take on various responsibilities, from joint crop planning, to shared transportation/ distribution, to shared storage or processing infrastructure, to collective marketing and leading a regional brand initiative. Elsewhere in B.C co-ops have been used to mentor and support smaller/newer producers by the co-op contracting them for certain crops.

There is interest in the Robson Valley in learning more about cooperatives, and there is a precedent in the RV. Cooperatives are widely used in other parts of B.C. from informal arrangements, to legal cooperatives, to being the entity who is a registered agency with the B.C. Vegetable Marketing Commission. The following actions are potential steps to further explore this type of arrangement and provide information and support to local producers. Any of the following actions could be led by the CF-FFG, or the CF-FFG could secure the funding for a local producer to spearhead the actions.

Actions:

- 4.1 Coordinate a guest speaker event (in the off-season) from established producer co-operatives (e.g. Discovery Organics, or Glen Valley Co-op)
- 4.2. Conduct research on the business case for co-operatively growing, marketing or distributing specific crops
- 4.3 Complete a feasibility study, in partnership with producers, for co-operative root vegetable storage and other storage crops

- Collect any past documentation from previous discussion of shared storage
- Review the Maple Ridge Garlic Storage and Processing Feasibility Study
- Engage potential buyers identified in this RVMOA report in the feasibility study
- Re-engage the Ministry of Agriculture in this project

The Glen Valley Organic Farm Co-operative

If you have buyers able to and willing to buy from local farms, and the farms are willing to work together- then a co-op makes a lot of sense. Co-op can do packaging, quality assurance, market coordination, follow up on collections. Co-op could be a group of farmers that hire someone to do that coordination for them, then they have to work at a scale where it makes sense to hire that person for them.

The co-operative has two layers: 1) The Glen Valley Organic Farm co-op is a land co-op. The farm owns the land. As a legally incorporated co-operative it oversees the farm asset and ensures maintenance of the asset. 2) A marketing collective. This is not done through a legal co-op, but rather through a registered partnership. A loose definition of a collective would be a written agreement with traceability back to the farms. The marketing collective coordinates crop production and shares market outlets. Each of the farm businesses in the marketing collection functions a bit differently. Two businesses are running CSAs, and they formed a partnership to do this. Fruit farms from Cawston were added to the CSA in order to offer a fruit share. A colleague in Abbotsford joined to sell product for the CSA. Each business can drop crops as partners are added, through a coordinated crop plan. This allows them to work on and improve cost of production per crop. The collective also goes to Farmers Markets and partners with a few additional farmers for this market. For example, a small blueberry farmer has joined this initiative adding blueberries to the farmers market stand. The collective is also able to support him as he scales up, this is an intentional and strategic way of supporting new farms getting into the sector. Rule is that it has to be a collective or a cooperative.

There is over 10 years of experience in the Vancouver area of farmers working in cooperatives and collectives. Some Farmers Markets see collectives as opportunity, whereas others don't want a whole bunch of re-sellers.

The challenges of a successful cooperative or collective are personalities. However, if farms can agree on principles and procedures, then hire someone, it is better to have third party oversee the co-op's operations rather than have series of long meetings with differing opinions.

For Glen Valley Farm, they wrote a job description and hired someone who had lived and worked on farm for 3 years in the past. He wrote operating procedures. The co-op does their crop planning together over winter. 1 person leads development of a plan that incorporates all of the crops in a way that provides equitable sales for each partner. They have the procedure that the cooperative portion isn't every farm's sole source of sales. There is an understanding at the start of what portion of each farm's sales and how much the co-op is coordinating.

5) Conduct Robson Valley Specific Production Trials/ Product Research

Description: Cost of production and the price squeeze was one of the most highly rated gaps and biggest issues that emerged. Many provincial resources exist on cost of production, but these are truly farm-specific and RV cost of production calculations for specific crops and farms would be useful. Specific emerging processed goods were flagged in the report and it would be interesting to investigate these further, as well as other early and late season products/crops of interest to local producers. Producers have said that they don't have time for market research, so these actions look to fill that gap and also ultimately provide farm-specific recommendations to reduce costs of production, and increase profit margins through local research and local business planning support.

5.1 Complete applied detailed market analysis, production cost and business case planning for specific crops or goods (including Non-Timber Forest Resources).

- This could be done separately from activity 4, as this does not need to be done in a co-operative context.
- The Columbia Basin Business Advisors program has an exceptional agriculture-specific model and resources.

5.2 Co-ordinate on-farm season extension/ variety trials and research.

- Trials and research should be conducted for berries, fruits, and greens in particular.
- Funding programs exist for this type of work, which would likely be keen to see Robson Valley sites and representation.
- Any trials should include 5.1, as field trials are very challenging to fund and maintain in B.C. without being connecting to additional facets of research/analysis.

PART 3: IMPLEMENTATION PLAN

6.0 Implementation Plan

1. Increase sales through existing direct local channels.

<i>Action</i>	<i>Immediate Steps</i>	<i>Project timing/length</i>	<i>Estimated Cost</i>	<i>Potential Partners</i>	<i>Funding Opportunities</i>
<i>1.1 Further evaluate and ground truth vendor gaps in nearby Farmers Markets</i>	<ul style="list-style-type: none"> Evaluate vendor lists in nearby markets Access or complete Farmers Market consumer surveys Share results with producers and encourage action 	Fall 2021 to strategize for next season	Low: \$0-\$5,000.00	B.C. Association of Farmers Markets Nearby Farmers Markets UNBC	None identified. Seek a student researcher or volunteer to complete this research
<i>1.2 Connect with tourism sector and foster Agri-Tourism for farm exposure</i>	<ul style="list-style-type: none"> Add Agri-Tourism layer to asset map and turn this into a farm map Connect with regional tourism to promote map of local farms that accept visitors and have retail operations 	Immediate. Spring-Summer 2021	Low: \$0-\$5,000.00	Northern B.C. Tourism Village of McBride Village of Valemount	Northern Development Initiative Trust (Marketing Initiatives stream)
<i>1.3 Coordinate “meet your maker/meet your produce manager” events</i>	<ul style="list-style-type: none"> Coordinate a workshop to prepare producers for these events including how to prepare a sell sheet, refining their ordering processes, determining the products and volume they can offer 	Fall 2021/Winter 2022	Low: \$5,000.00-\$10,000.00	Entrepreneurial local producers Farm Folk/City Folk (for their event model).	Government of B.C. Community Economic Recovery Infrastructure Program (Rural Economic Recovery Stream)

1.4 Increase box program and delivery sales channels through e-commerce training and support	<ul style="list-style-type: none"> • Host events to connect producers to chefs, and local/regional grocery managers • Provide follow-up support to negotiate agreements 				
	<ul style="list-style-type: none"> • Poll local producers to find out who is using e-commerce and who would like to • Host a workshop and/or invite a guest speaker to provide information and training on setting up e-commerce • Secure a producer subsidy to cover the costs of setting up their online store 	Fall 2021/Winter 2022	Low \$0-\$5,000.00 (for coordination. Not including subsidy) Subsidy= \$1,000 per farm for tech/design support	BCAFM B.C. Markets Online program Regional farms already using e-commerce Shopify (solicit in-kind contribution)	Government of B.C. Community Economic Recovery Infrastructure Program (Rural Economic Recovery Stream) Innovation and technology funding

2) Increase regional/ extra-regional meat sales and build red meat value chain

Action	Immediate Steps	Project timing/ length	Estimated Cost	Potential Partners	Funding Opportunities
2.1 Complete a Regional abbatoir feasibility study	<ul style="list-style-type: none"> • Complete a review and interviews re: Salt Spring Island Regional abbatoir, Robson Valley mobile abbatoir, Port Alberni abbatoir as a first step. Abbatoir feasibility study for the Capital Regional District of British Columbia 	Immediate	Low: \$5,000.00-\$10,000.00	B.C. Ministry of Agriculture B.C. Association of Abbatoirs and B.C .Meats Robson Valley Cattlemens' Association	Northern Development Initiative Trust (Economic Infrastructure stream)

2.2 Coordinate an information session re: grass-fed/ locally finished red meat and other certification options	<ul style="list-style-type: none"> Complete a feasibility study/ cost-benefit analysis for a Robson Valley regional abattoir 				Investment Agriculture Foundation
	<ul style="list-style-type: none"> Engage a small number of producers (through interviews or a small focus group) to define the sectors' primary information gaps Coordinate experts in the field, including successful grass-finished producers, to speak with RV producers and provide information Source and distribute a simple cost/benefit and market analysis of conventional vs. grass-finished red meat. 	Fall/Winter 2021/2022	Low: \$0-\$5,000.00	McBride Farmers Institute B.C. Cattlemen's Association (Verified Beef Production Plus Program) B.C. Beef Producers B.C Ministry of Agriculture B.C. Bison Association B.C. Sheep Association B.C. Meats for B.C. Families Initiative	Canada-B.C. Knowledge Transfer Events Program under the Canadian Agricultural Partnership

3) Capture increased market share of adjacent markets and wholesale channels

Action	Immediate Steps	Project timing/ length	Estimated Cost	Potential Partners	Funding Opportunities
3.1 Group training (food safety system, packing and grading etc.)	<ul style="list-style-type: none"> Determine number of interested parties Identify trainers 		Low: \$0-\$5,000.00	Young Agrarians Canada GAP B.C. Ministry of Agriculture.	Canada-B.C. Knowledge Transfer Events Program under the Canadian Agricultural Partnership

3.2 Establish CF-FFFG/agricultural marketing liaison and marketing support role	<ul style="list-style-type: none"> Identify B.C or Canada food brokers Develop job/contract description Source funding for role 		High: ½ to full-time position per year (position could serve all of RD-FFG not just the Robson Valley)		<p>None identified</p> <p>Recommended to utilize CF-FFG core funding.</p>
3.3 CF-FFG led value chain establishment	<ul style="list-style-type: none"> Shortlist the potential products identified in this report as having demonstrated demand Host a brainstorming session with producers to reduce list to top 3 Determine quantity currently produced in RV Identify value chain partners Meet with partners to develop planning/solutions around top 3 products and refine to 1-2 RV niche product Complete Action 5.1 for these 1-2 crops with each producer who produces them 	Begin fall/winter 2022/2023 after pre-cursory actions in plan are completed (actions 1, 2 and 4)	Medium: ~\$50,000.000	B.C. Ministry of Agriculture	<p>None identified</p> <p>Recommended to utilize CF-FFG core funding</p>

4) Establish a broadened Robson Valley cooperative (co-op) or collective

<i>Action</i>	<i>Immediate Steps</i>	<i>Timeline</i>	<i>Estimated Cost</i>	<i>Potential Partners</i>	<i>Funding Opportunities</i>
4.1 Coordinate a guest speaker event (in the off-season) from established producer co-operatives	<ul style="list-style-type: none"> Connect with the Robson Valley Growers Cooperative to gauge their interest and to identify a point person for collaboration Connect with the appropriate B.C. Ministry of Agriculture Regional Agrologist re: event funding 	Fall 2021/Winter 2022	Low: \$0-\$5000.00	Robson Valley Cooperative Discovery Organics Glen Valley Co-op Hope Farms B.C. Cooperatives Association	Local Credit Unions Canada-B.C. Knowledge Transfer Events Program under the Canadian Agricultural Partnership
4.2. Conduct research on the business case for co-operatively growing, marketing or distributing specific crops	<ul style="list-style-type: none"> Connect with the Robson Valley Growers Cooperative to gauge their interest and to identify a point person for collaboration Complete a research review on relevant models from elsewhere in B.C. or other jurisdictions Choose crops based on analysis in 3.3 	After, or in parallel to Activity 3.3.	Dependant of # of crops. Low: \$5,000.00-\$10,000.00	Robson Valley Cooperative UNBC Discovery Organics B.C. Cooperatives Association	None identified
4.3 Complete a feasibility study, in partnership with producers, for co-operative storage infrastructure	<ul style="list-style-type: none"> Collect any past documentation from previous discussion of shared storage Review the Maple Ridge Garlic Storage and Processing Feasibility Study 		Low: \$5,000.00-\$10,000.00	Former owners of Twin Meadows Farms UNBC B.C. Ministry of Agriculture	Investment Agriculture Foundation Northern Development Initiative Trust (Economic

(roots and other storage crops)

- Engage potential buyers identified in this RVMOA report in the feasibility study
- Re-engage the Ministry of Agriculture in this project

Infrastructure stream)

5) Conduct Robson Valley Specific Production Trials/ Product Research

Action	Immediate Steps	Timeline/ Project Length	Estimated Cost	Potential Partners	Funding Opportunities
5.1 Complete RV-focused detailed market analysis, production cost and business case planning for specific crops or goods	<ul style="list-style-type: none"> • Share program information and consultant list with local producers • Facilitate funding applications and consultant recruitment • Share general/non-confidential results in a local forum 	On-going, crop-by-crop as interest arises or opportunities identified	Medium: \$5,000.00 per crop	B.C. Ministry of Agriculture Qualified Program Consultants Community Futures Central Kootenay and Columbia Basin Business Advisors (for information on their models)	Agri Food Development Farm Business Planning Program
5.2 Co-ordinate on-farm season extension/ variety trials and research	<ul style="list-style-type: none"> • Connect with industry representative or industry specialists to identify new varieties of berries, fruits, and greens to trial • Identify season extension techniques to trial • Identify interested producers • Secure stable 3-year funding 	Initiate later 3-year project	Medium/high: \$20,000-\$80,000	Ministry of Agriculture Industry Specialists UNBC Climate Agriculture B.C. B.C. Agriculture and Climate Adaptation Research Network	Farm Adaptation Innovator Program Agri Food Development Farm Business Planning Small farm accelerator program

(to identify researcher
partners)

Relevant commodity groups

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Appendix 1: Survey Questions



Growing the Agriculture Sector in the Robson Valley

Robson Valley farmers, growers and ranchers, please share your opinion! The results of the following survey will be used to complete a Regional Market Opportunity Analysis currently underway and is the first study that focuses specifically and solely on the Robson Valley. *(The survey will take you approximately 15 mins or less to complete.)*

This Market Opportunity project is part of a broader 3-year program of Community Futures Fraser Fort George to support Robson Valley producers in expanding their agricultural operations. Your input will help us identify the top 5 market opportunities to overcome key Robson Valley challenges and gaps. Survey respondents have the option to be entered into a prize draw to win local food/farming gift certificates.

Data entered into this survey will be viewed by Community Futures Fraser Fort George (CFFFG) and the project consultant. Data will be kept by CFFFG. Only aggregated and anonymized data will be shared in a public report. Please contact 250-561-6424 ext.117 with any questions or concerns.

*** 1. Do you reside in the Robson Valley?**

- ☐ Yes, full-time
- ☐ No
- ☐ Yes, seasonally



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*** 2. Do you grow food or raise livestock?**

☐ Yes

☐ No



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3. What are your main agricultural products? *(Choose all that apply)*

Livestock (please specify type and number)

Poultry (please specify type and number)

Field vegetables (please specify type)

Greenhouse vegetables (please specify type)

Herbs (please specify type)

Berries (please specify type)

Fruit (please specify type)

Nursery plants

Fruit for wine/spirit making

Flowers

Nuts

Grains

Medicinal crops (e.g. cannabis, herbs for holistic medicine)

Honeybees (please specify number of hive)

Other

4. If you wanted to, could you expand your farm operations on your current site? *(in terms of either production levels or area of production)*

☐ Yes

☐ No

5. What are the major constraints or restrictions to expanding your farm operation? *(Check all that apply)*

- | | |
|---|---|
| <input type="checkbox"/> Size of parcel | <input type="checkbox"/> Lack of distribution/transportation infrastructure |
| <input type="checkbox"/> Land availability or cost of land | <input type="checkbox"/> Lack of labour |
| <input type="checkbox"/> Constraints on parcel (e.g., soil, water) | <input type="checkbox"/> Lack of local market |
| <input type="checkbox"/> Ownership of my land | <input type="checkbox"/> Lack of non-local market |
| <input type="checkbox"/> Growing season/northern climate | <input type="checkbox"/> Time |
| <input type="checkbox"/> Lack of investment capital | <input type="checkbox"/> Lack of business plan |
| <input type="checkbox"/> Lack of storage or processing infrastructure | |

Other (please specify)

6. Do you produce a particular product/crop/food that you would like to produce/sell more of?

- ☐ Yes
- ☐ No



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7. Please specify which crop and what prevents you from producing more of it

8. What are the **STRENGTHS** of farming, ranching and food production in the Robson Valley? (Please rank. Can click and drag into your preferred order. #1 is top strength.)



Natural environment (e.g., low land costs, access to farmland, good forage)



Infrastructure (e.g., farm stores, soil amendments in region)



Knowledge and information resources (e.g., farmer knowledge and networks, workshops/seminars, community halls for gathering, Farmers institutes)



Human resources (e.g., good neighbours, skilled farmers)



Financial resources (e.g., crop insurance, credit and loans for agriculture)



Policy and regulatory resources (e.g., supportive government programs like Buy BC, environmental farm plan, protective regulations like Agricultural Land Reserve, regional district programs, Community Futures programs)



Marketing and distribution resources (e.g., local Farmers markets, local population interested in food security)

9. What do you think are the top CHALLENGES affecting farming and food production in the Robson Valley? (Please rank. Can click and drag into your preferred order. #1 is top challenge.)



Natural environment challenges [e.g.: Remote location, Growing season length, mixed/complex soils in region, Climate change, water, Wildlife threats to livestock and crops]



Infrastructure challenges [e.g., Internet connectivity Lack of supporting infrastructure (processing, abattoirs, cold storage, packing and grading facilities, distribution etc.)]



Knowledge and informational resources [e.g., lack of extension, lack of local government resources and of trade associations and industry/commodity groups (located in south of province)]



Human resource challenges [e.g., farm labour and associated issues (lack of labour, challenges associated with farm worker housing), lack of succession planning (age of farmers, no new young farmers), lack of time and capacity for farm/ranching industry to work together to support each other]



Financial resource challenges [e.g., limitations of crop insurance and other farm financial tools]



Policy and regulatory resources [e.g., understanding and meeting regulations (Water Sustainability Act, Food Safety Act), rules re: booths and staffing at Farmers Markets]



Marketing and distribution resources [e.g., lack of consumer awareness or support for product, lack of opportunities and support to sell locally, lack of information and support to sell out of region]

10. Please indicate if you work on the farm full time or part time

- ☐ Full-time
- ☐ Part -time

11. Would you like to grow your business and devote more of your time to the farm and/or hire additional employees?

- ☐ Yes
- ☐ No
- ☐ Maybe

12. Do you engage in any on-farm processing or value-added products? *(such as dehydrating, bottling, canning, yogurt or cheese-making etc.)*

- ☐ Yes
- ☐ No

Please comment and specify which products



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13. Would you like to add value-added activities/processing to your operation?

- ☐ Yes
- ☐ No
- ☐ If yes, what would you like to process?

14. Are you involved in any form of Agri-tourism activities on your farm?

- ☐ Yes
- ☐ No, but I would be interested in this type of expansion
- ☐ No, and I am not interested in this type of expansion

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15. Please select all Agri-tourism activities that apply to your farm operation

- | | |
|---|---|
| <input type="checkbox"/> Accommodation (e.g. B&B, Air B&B) | <input type="checkbox"/> Weddings, live music, or other non-farm events |
| <input type="checkbox"/> Accommodation other (camping or other) | <input type="checkbox"/> Selling products at the farm gate |
| <input type="checkbox"/> Farm tours | <input type="checkbox"/> U-Pick or U-dig |
| <input type="checkbox"/> Harvest festivals or other farm events | |

Other (please specify)

16. Through which channels do you sell your products and make your farm income? *Please use the drop down menus (EITHER by \$ or by weight) to indicate an estimate of which are your main, secondary and tertiary sales channels.*

	By Farm income	OR	By weight/volume
Farm gate retail	<input type="text"/>		<input type="text"/>
Grocer retail	<input type="text"/>		<input type="text"/>
Wholesale/ to distributor	<input type="text"/>		<input type="text"/>
Farmers' Markets	<input type="text"/>		<input type="text"/>
Restaurants/other foodservice (e.g. catering, institutional sales)	<input type="text"/>		<input type="text"/>
Home delivery	<input type="text"/>		<input type="text"/>
Community Supported Agriculture (CSA) or other box program	<input type="text"/>		<input type="text"/>
Mail order/phone	<input type="text"/>		<input type="text"/>
Online sales	<input type="text"/>		<input type="text"/>
Other	<input type="text"/>		<input type="text"/>

17. Where do you sell your agricultural products? (1= where you sell the *MOST* products, 2= second highest location for sales, etc.) *DO NOT rank and leave blank if location does not apply*



Locally (within the Robson Valley)



Regionally (Central Interior/Hwy 16/neighbouring regions)



Other parts of BC



Other parts of Canada



Internationally

18. Have you participated in any business or marketing training?

☐ Yes

☐ No

19. What was it (name or course and who it was offered by) and was it useful?

20. Are you interested in participating in any business or marketing training in the future?

☐ Yes

☐ No

☐ Don't know/ depends

21. Are you interested in learning more about the advantages and disadvantages of being part of a farmer's co-operative group? *(This could involve joint supply planning, bulk purchasing, marketing, distribution, sales, shared equipment, etc.)*

- ☐ Yes
- ☐ No
- ☐ Not sure

Comments:

22. What types of challenges affect your ability to sell your products to distributors (e.g. Sysco, United Natural Foods) and/or larger retailers (e.g. Save-On, Safeway)? *Please check off all that apply.*

- ☐ Meeting labelling regulations
- ☐ Packaging problems
- ☐ Meeting grading standards/processes
- ☐ Bar Code (UPC) problems
- ☐ Finding Consistent farm inputs
- ☐ E-commerce challenges
- ☐ Lack of a business/marketing plan
- ☐ No regional marketing association or support
- ☐ Cannot find marketing data specific to my products
- ☐ Meeting quality assurance
- ☐ Small level of production/economy of scale
- ☐ HACCP plan
- ☐ GAP certification
- ☐ Production Challenges: Meeting quantities ordered and maintaining consistent supply
- ☐ Transportation system issues (e.g., road closures.)
- ☐ Transportation quality issues (e.g., access to refrigerated trucks)
- ☐ Unsure of how to contact/start selling to distributors or larger retailers.
- ☐ None of the above

23. In which community do you reside?

- ☐ Dunster
- ☐ McBride
- ☐ Valemount
- ☐ Other (please specify)

- ☐ Tete Jaune
- ☐ Dome Creek

24. Do you have anything else you want us to know as we develop this Market Opportunities Assessment?

25. Please enter your phone number and/or e-mail if you'd like to be enter into a prize draw for local food/farming gift certificates.

Name

City/Town

Email Address

Phone Number

Appendix 2: Full interview Guide

Part 1: Farmers

1. Tell me about your role at the farm?
2. Any experience selling directly to retail?
 - Pros, cons
3. Any experience selling directly to chefs/ restaurants?
 - Pros, cons
 - Are there any regulations related to selling to local stores/restaurants/chefs that are barriers for you?
4. What opportunities exist for improving connections between producers and retailers & restaurants?
5. What are chefs and retailers looking for?
 - Specific food items
 - specific format/sizing/packaging
 - Specific characteristics (sustainable, organic, BC grown, local, other)
6. Any experience selling to distributors?
 - Pros, cons
7. Any experience using a food broker?
 - Pros, cons
8. Advice for other farmers looking to develop an online store?
 - What are the strengths?
 - What are the challenges?
9. Any items you see unmet demand for from customers (generally, over the years)?
10. Any changing demand through covid? (products, type of customers, formats/sizes and how things are packaged)

Part 2: Distributors/ Foodservice (restaurant and catering)/retail/ Customer experts

Demand, demand trends

1. Which products is their unmet demand for (*i.e. you carry them, but can't meet demand*)?
2. Which imported products could you replace with local (if it was available in quality and quantity)?
3. What percentage of each type of vegetable do you import, and why?

Vegetable	% imported	Comments on reasons for importing

4. What products are unavailable (*i.e. you would like to carry them*)?
5. What product is unavailable in certain formats (case size, degree or style of preparation, other)?
6. Any products they couldn't get during COVID?
7. Any products (or product formats) they need now more due to new consumer wants and new covid (pickup /delivery) model?

Purchasing policies/standards

8. What are the criteria for accepting a new (or new to you) food product into your product line?
 - ☐ Must be represented by Broker/Distributor
 - ☐ Quality Labelling
 - ☐ Quality Product
 - ☐ Local Production
 - ☐ Organic
 - ☐ Chemical Free

- ☐ Price Competitive
- ☐ Demonstrate Production Capabilities
- ☐ Food safety certified
- ☐ Demonstrated market demand
- ☐ BC Branded
- ☐ Other

9. What are the most important considerations for you in choosing the source of your meat?

10. What are the most important considerations for you in choosing the source of your produce?

Gaps (issues)

11. What are the challenges of working directly with smaller/ medium farmers?

12. What could be done to help you more effectively manage each of the challenges or risks that you identified above?

Opportunities

13. What opportunities do you see for small to medium scale BC producers?

- Vegetable
- Meat
- Value added

14. What trends have you seen in B.C. food sales over the last 5-10 years?

15. What do you expect will be the greatest market opportunities 5-10 years from now?

16. What is the interest level of your operation in selling local (RV) products at stores and restaurants?

17. Is there a willingness to pay a premium for local (RV) products?

Follow up and Closing

18. What ordering/delivery system would be most effective in meeting your needs?

- ☐ Sales/service through existing distributor
- ☐ Sales/service provided by the producer or a representative.

19. Do you have anything else to add that is relevant to this Robson Valley Market Opportunities Analysis?

20. Would it be acceptable for someone to contact you regarding purchasing local products in the future?

Additional questions for chefs/restaurants and catering:

What opportunities exist for improving connections between producers and retailers & restaurants?

What are Chefs and retailers looking for: (e.g.)

- *Storage crops out of season*
- *Other crops out of season (e.g. frozen berries)*
- *Speciality crops (e.g. local ginger, wasabi)*
- *Asparagus (most comes from Mexico)*
- *Vegetables – all kinds*
- *Berries*
- *Walnuts (high price of imports)*
- *Grains/flour/ancient grains*
- *Dairy and cheese (cow or goat or sheep)*
- *Beef (well finished)*
- *Venison*
- *Herbs*
- *Wild mushrooms*
- *Other wild harvested products*

Part 3: Tourism

1. Do you serve meals with your (insert tourism activity) package?
2. Please describe your food service and the extent of your tourism season?
3. Approximately how many meals do you serve per year? (# of packages x # of guests)
4. Can you estimate the volume of meat and produce that you purchase (weekly or monthly) in your high season?
5. Are you interested in incorporating locally branded RV ingredients into your cuisine?
6. Would your clientele value and/or pay a premium to experience local RV foods?
7. What are your considerations, criteria or any concerns regarding purchasing from local suppliers?
8. Which food products do you use that you would consider replacing with local products?
 - ☐ Grains
 - ☐ Honey
 - ☐ Eggs
 - ☐ Meat
 - ☐ Beef (what cuts?)
 - ☐ Pork (what cuts?)
 - ☐ Poultry (what cuts?)
 - ☐ Dairy
 - ☐ Fruits
 - ☐ Berries
 - ☐ Salad Greens
 - ☐ Herbs
 - ☐ Storage vegetables
 - ☐ Other
9. Would it be acceptable for someone to contact you regarding purchasing local products in the future?

Appendix 3: Interview outreach and outcomes

This list was presented to CF-FFG shortly after Project Meeting #2. Project scope only enabled a limited number of interviews, so prioritization was necessary. Since previous research (reviewed as a part of the background research) engaged heavily with food service in the Valley and nearby communities, and since this sector has been the most heavily disrupted by the pandemic, foodservice was not a focus. Other larger distributors and retailers from the complete list were de-prioritized in favour of smaller retailers and wholesalers who are more relevant to the typical scale of production in the Robson Valley. For certain companies, a review of their purchasing policies was conducted in lieu of an interview. In the case of the Quesnel Food Hub, an interview was considered, but results of their recent survey were reviewed instead.

A brief description of the stakeholder/organization and the outcome of the contact attempt, or reason for not pursuing an interview is included. Those who were not contacted or not available could be approached during a future program phase.

Stakeholder/ Organization	Type	Description	Outcome
McBride AG Foods	Local retail		Declined an interview
Birch and Boar	Local retail (regional/ specialty)	They carry a wide selection of in house cured meats, fresh steaks, and pork, all sourced from local farms.	Retailers closer to the Valley were contacted instead.
Four Seasons Farms (at Granville Island Public Market)	Regional retail	Four Seasons Farms and Sunlight Farms both carry a vast array of produce including fresh fruits and vegetables from local farmers. There are always current seasonal foods on the shelves, and they provide the staples all year round.	Vancouver markets (such as Granville Island) were mentioned in previously completed research. However, the markets there appear to have what they need from their local farmers, so other interviews were prioritized.
Sunlight Farms (at Granville Island Public Market)	Regional retail		
Eden Yesh	Cooperative distribution model	Cooperative producer distribution out of Invermere. Company no longer in business. An interview would still be informative.	Unavailable for an interview in project window

Stakeholder/ Organization	Type	Description	Outcome
Centennial Foodservice Prince George	Distributor	Centennial Foodservice is Western Canada's leading seafood, poultry and premium meats foodservice and distribution company. Specializing in Centre of the Plate proteins as well as custom processing.	Un-responsive to contact attempts. De-prioritized
Sysco Kelowna	Distributor		Un-responsive to contact attempts. De-prioritized
Sysco Edmonton	Distributor		Un-responsive to contact attempts. De-prioritized
Shoppers Wholesale (Prince George)	Distributor	Connected to Presidents Choice chain/brand	Smaller provincial companies were prioritized over national scale companies.
Evil Dave's Grill	Foodservice (Restaurant)		Currently closed
Anthony's Restaurant @ Amethyst Lodge	Foodservice (Restaurant)		De-prioritized
Tekarra Restaurant (@ Tekarra Lodge)	Foodservice (Restaurant)		De-prioritized
Central Interior Catering (PG)	Foodservice (Catering)	Full service camp coordination, including catering.	Other respondents were prioritized
Two Rivers Catering	Foodservice (Catering)	CMHA Canadian Mental health association – Prince George's – social enterprise businesses	Un-responsive to contact attempts.
EZ Mealz	Foodservice (Catering)	Catering business PG.	Other respondents were prioritized

Stakeholder/ Organization	Type	Description	Outcome
Robson Heli Magic	Foodservice (tourism meals)		Un-responsive to contact attempts. Ceased contact attempts once CMH was willing.
Crescent Spur Heliskiing	Foodservice (tourism meals)		Un-responsive to contact attempts. Ceased contact attempts once CMH was willing.
Bear paw heliskiing	Foodservice (tourism meals)		Un-responsive to contact attempts. Ceased contact attempts once CMH was willing.
White water rafting	Foodservice (tourism meals)		All types of tourism were briefly considered as potential markets, and thus were part of original list. However, rafting meal packages appear minimal and not high-end.
Cowgirl up adventures (Tete Jaune) horseback riding	Foodservice (tourism meals)		All types of tourism were briefly considered as potential markets, and thus were part of original list. However, riding meal packages appear minimal and not high-end.
Willow Ranch (Valemount) horseback riding	Foodservice (tourism meals)		This ranch is looking for local catering for their meals, not ingredients.
Falling Star Ranch (Dunster) horseback riding	Foodservice (tourism meals)	retreats, clinics, workshops.	No food, just horse training
United Natural Foods Inc	Distributor		Policy review conducted.
Whole Foods Market	International retail		Policy review conducted.

Stakeholder/ Organization	Type	Description	Outcome
SPUD	Provincial online retail		Policy review conducted.
Quesnel Food Hub	Regional association		Survey results reviewed

Appendix 4: Farms classified by total gross farm receipts

	British Columbia		Fraser-Fort George, British Columbia		Fraser-Fort George H, British Columbia	
Farms classified by total gross farm receipts	2011	2016	2011	2016	2011	2016
Total gross farm receipts (excluding forest products sold)	2,935,906,056	3,729,364,086	39,014,029	28,319,045	4,649,020	8,540,275
Farms, under \$10,000	9,591	7,295	272	233	55	51
Farms, \$10,000 to \$24,999	3,254	2,934	130	93	26	20
Farms, \$25,000 to \$49,999	1,963	1,790	75	58	22	15
Farms, \$50,000 to \$99,999	1,510	1,541	48	52	9	10
Farms, \$100,000 to \$249,999	1,381	1,594	20	35	6	9
Farms, \$250,000 to \$499,999	786	884	6	11	0	2
Farms, \$500,000 to \$999,999	618	642	4	4	3	1
Farms, \$1,000,000 to \$1,999,999	437	497	1	6	0	3
Farms, \$2,000,000 and over	219	351	2	0	0	0

Appendix 5: Asset Map Methodology

The online asset map was developed using Google My Maps to highlight locations of infrastructure, markets and other assets that could support production and processing for the Robson Valley and beyond. The asset map is a work in progress, is not comprehensive, nor were the assets included prioritized or ranked in any way. The asset map is meant to serve as a starting point of a visual tool, for future development. The map layers and categories are described in this section. The map layers were developed and populated using online search engines (Google Maps, Yellow Pages), combined with various directories (e.g. B.C. Foodservice Distributors, B.C. Meat Plants, Robson Valley Agricultural Producers Guide, B.C. Farmers Market Association website). This information can be easily reviewed by visiting the map (<https://tinyurl.com/28xm8tv2>), and is being updated in an on-going fashion.

Appendix 6: B.C. Vegetable Marketing Commission Regulated Crops

Storage crops: (regulated for fresh and processing)

- Beets (tops off)
- Green Cabbage
- Red cabbage
- Carrots (tops off)
- Parsnips
- Potatoes (all types, varieties)
- Rutabaga
- White (purple top) turnips
- Yellow onions

Greenhouse crops (regulated for fresh and processing use)

- Cucumbers (all types)
- Lettuce
- Tomatoes (all types)
- Peppers (all types, including hot/spicy varieties)

Processing crops (only regulated for processing use)

- Beans
- Broccoli
- Brussels sprouts
- Cauliflower
- Corn
- Peas
- Strawberries

Appendix 7: Robson Valley Retail Grocery and Local Procurement Opportunities

Store	Description of food product	Local products	Criteria/process for local procurement	Potential to source more local product
Robson Valley Essentials (part of Robson Valley Home Hardware)	Dry foods and dry goods	No	N/A	No
Valemount IGA (purchasing by Georgia Main food group)	All	Focus on B.C. product (via GM)	Distribution would be covered by farmer. All food safety (HACCP) requirements and insurance requirements would need to be met.	Small potential for individual store to carry local RV product. Normally has to supply whole chain.
Dunster General Store	Places bulk food orders for local residents. Pet feed, animal feed, produce, dairy, fresh meat, frozen meat, dried goods.	Owner carries her own potatoes, garlic and produce in summer. No local meat or dairy. A few other local farmers sell their produce on a small scale (e.g. owner's neighbour from her garden).	In order to carry additional items (e.g. value added or bakery), food would have to be processed in an inspected kitchen. Meat would have to go through a Class A or B abattoir	If local producers can offer produce she doesn't have then she will buy from them. The producer would have to be from nearby and be responsible for managing their own product/display. Interested in carrying local grain.
Infinity Store and Health	Organic health food store. Cooler with dairy. No meat.	Local herbal preparations. Local garlic. Local eggs. Local carrots are only produce carried (at Mar 2021) Alpaca wool from Alberta.	Open to carry all produce that is grown locally. Happy to work with local growers. Product needs to be organic (not necessarily certified). Product needs to be consistent and reliable.	Primarily interested in products that are more shelf stable (e.g. root vegetables, local broccoli). Interested in a consistent source of local honey.
McBride Farm Store	Fresh meat, frozen meat, produce, fresh eggs. Owner also has a farm in PG and an animal feed store in McBride.	Seasonal local produce. Eggs. Meat from Prince George.	No known formal criteria.	Will work with local/regional growers and producers.

Store	Description of food product	Local products	Criteria/process for local procurement	Potential to source more local product
Uncle Marks Eatery	Fresh/frozen meat. Local rye. B.C. grown grains.	Local meat. Interested in local produce. Local rye.	No known formal criteria.	Will work with local/regional growers and producers.

Note: At the time of a 2012 report the following Robson Valley and region food businesses were buying case volumes of local produce in the Robson Valley: Beanery 2 Bistro, Cariboo Grill, Dunster General Store, The Gathering Tree, Jasper Park Lodge, Swiss Bakery, Tekarra and Restaurant (Gunner and Watt, 2012).

Appendix 8: B.C. Wholesale/Distribution Purchasing Sample Summary

Company	Description	Volume	Purchasing approach/criteria	Process
Associated Grocers	Encompasses many brands. Wholesale brands that distribute across western Canada. Largest wholesaler to independent grocers.	Mostly purchasing trailer volume. Occasionally purchases a minimum of ~3 pallets of certain products. Needs enough product to cover western Canada (across 3 distribution centres)	Goal is to buy Canadian first (growers, packers, shippers). As soon as B.C. product is available, they start to purchase it. An audited food safety system is the most important criteria. Wholesaler can only buy from suppliers who are food safety certified. Producers do not need to be working with a broker.	Contact directly
Discovery Organics	Certified organic wholesale operation. Value chain business model mentors growers in Canada and as far as South America and provides them with market information and requirements for entering into wholesale supply chain. Mostly sell to small retailers around B.C. in small towns. Trying to build more diverse farms and build B.C. food security.	Can work with smaller growers if they have a high value crop. Smallest grower they work with is 9 acres (high value raspberries + freezer). They have garlic growers who call them when they have a few hundred pounds.	Exclusively certified organic farms. As local as possible as often as possible (60% B.C. produce in summer). If there is anything that can be grown in B.C. they are looking to source it and give advice how to pack it. In Central and South America criteria is related to labour practices.	Contact directly
Georgia Main	Provincial retail (IGA of B.C. and Fresh St. Market). Sister company at produce terminal does distribution	Small retailer (30 stores) so they have ability to work with smaller farms. They encompass 2 brands, IGA and Fresh Street. Fresh Street only has 6 stores, so more amenable to smaller supplier. While uncommon, they have the flexibility to	Local product is prioritized. Purchasing is not solely based on costing. Most B.C. product comes from the Fraser Valley and the Okanagan.	Contact directly

Company	Description	Volume	Purchasing approach/criteria	Process
		<p>source a small amount from a farm, and feature in only a few stores for a short time frame.</p> <p>Example: Worked with a farm for last 7 years, began with a small plot of asparagus which supplied 3 stores for one weekend. Worked collaboratively and now the same farm can supply all 6 fresh streets and IGAs for 1 month.</p>	<p>They are interested in finding better quality produce and produce available earlier in the season</p> <p>There is a small opportunity for a farmer to distribute directly to a single store.</p>	
B.C. Fruit Truck	<p>Supplies B.C. fruit (and veg) to Valemount, Alberta and the Cariboo. Goes through the Robson Valley (Valemount) on Saturdays.</p> <p>Only sells vegetables first two runs of year, in order to have more variety before fruit is ready.</p>	Unknown	<p>Sources berries from the Fraser Valley and fruit and vegetables from the Okanagan.</p> <p>Purchasing criteria is as follow: #1 -will it sell #2 -will it last in the cooler #3 -B.C. grown #4 -has it been freshly picked #5 -is it organic (also sources conventional) #6 -what is the price point (market value) and is it profitable</p>	Contact directly
SPUD	Online grocery store and delivery serving Lower Mainland, Vancouver Island, Thompson Okanagan, Calgary and Edmonton. Appears to feature product specific to local service region.	Unknown.	<p>Organic and sustainable growing methods. Commitment to the local community. Transparent about product ingredients and sources. GMO-free. Safe, fair working conditions. Respect ecological habitats and animal welfare.</p>	Online form. Asks for website, social media handles, and wholesale sell sheets.

Company	Description	Volume	Purchasing approach/criteria	Process
			Artisan products. Farms are less than 800 km from Vancouver warehouse.	
Whole Foods	International retailer. 500+ stores in North America and UK.	Unknown, but anticipated to be truckload scale to supply 5 stores in Lower Mainland. Through the Local Producer Loan Program, Whole Foods Market lends money to small, local, independent producers to help them expand their businesses. The program is driven by the eleven regions of Whole Foods Market, unclear if this program is in the Lower Mainland.	Traceable to farm or ranch. No antibiotics and no added growth hormones List of 100+ ingredients not allowed. Eggs are certified organic Non-GMO labels must be certified. Labeling requirements.	Online form for suppliers
United Natural Foods	International natural foods distributor. Over 10,000 SKUs. 3 locations in Canada, 1 in Richmond.	Unknown.	Independent third party non-GMO. Food safety audits required. HACCP required. Traceability systems required. Suppliers must meet all relevant laws. Complete UNFI's Pesticide Questionnaire, Insurance policy with UNFI as additional insured. Recall process in place	Online form for potential suppliers. Ask if you have a brand, brokers that you work with, and what your current retail customers are.

Appendix 9: McBride and Greater Vancouver Potential Consumer Segment Spending on Fresh Food

Characteristics	McBride	McBride Sample Potential Markets (2021 dollars)
Population; 2016	616	
Population percentage change; 2011 to 2016	5.1	
45-75 years	270	
Total number of census families	160	\$524,320
Couples without children	70	\$229,390
1 child	25	\$81,925
\$100;000 and over	30	\$98,310

Characteristics	Greater Vancouver	Greater Vancouver Sample Potential Market (2021 dollars)
Population; 2016	2463431	
Population percentage change; 2011 to 2016	6.5	
45-75 years	926270	
Total number of census families in private households - 100% data	679365	\$2,226,279,105
Couples without children	260290	\$852,970,330
1 child	129480	\$424,305,960
\$100;000 and over	256755	\$841,386,135

Appendix 10: Direct sales within the region

	British Columbia	Cariboo, British Columbia	Fraser- Fort George, British Columbia	Fraser- Fort George H, British Columbia	Fraser- Fort George A, British Columbia	Fraser- Fort George C, British Columbia	Fraser- Fort George D, British Columbia	Fraser- Fort George E, British Columbia	Fraser- Fort George F, British Columbia
Direct sales	2016	2016	2016	2016	2016	2016	2016	2016	2016
	Number								
All farms reporting 5	5,667	344	130	25	22	41	20	7	15
Farms reporting unprocessed agricultural products sold	5,532	337	124	23	22	39	18	7	15
Farms reporting value-added products sold	592	32	15	4	0	4	6	0	1
Farms reporting using farm gate sales, stands, kiosks, U-pick	5,047	300	111	19	20	35	19	6	12
Farms reporting using Farmers Markets	1,244	75	27	8	5	5	5	1	3
Farms reporting using Community Supported Agriculture (CSA)	249	11	5	1	0	1	0	1	2
Farms reporting using other methods	243	21	9	1	1	4	2	1	0

Appendix 11: B.C. Markets with 2020 Vendor lists

Market	Products	Number of Vendors (one vendor may offer products that fall under multiple categories)
McBride	Produce	3
	Meat	1
	Eggs	3
	Value-Added Food/Baked Goods	3
	Other	2
Valemount	Produce	5
	Meat	1
	Eggs	0
	Value-Added Food/Baked Goods	5
	Other	1
Prince George	Produce	5
	Meat	7
	Eggs	4
	Value-Added Food/Baked Goods	9
	Other	7
Hinton	Produce	1
	Meat	0
	Eggs	0
	Value-Added Food/Baked Goods	3
	Other	2
Quesnel	Market manager reported no gaps in vendors other than local fruit.	

Other includes: crafts (e.g. soaps, cosmetics), plants, alcohol

Appendix 12: Opportunities Criteria/ Ranking Table

<i>Opportunity</i>	<i>Mandate</i>	<i>Funding</i>	<i>Scope/Reach</i>	<i>Actionable</i>	<i>Ties to scaling up</i>	<i>Foundational</i>	<i>Sustainable</i>