Squamish Valley Agricultural Plan

Market Opportunities Analysis

September 2019

SQUAMISH - LILLOOET
REGIONAL DISTRICT

SQUAMISH

SQUAMISH
FOOD POLICY COUNCIL

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CENTRE for SUSTAINABILITY
WHISTLER

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Acronyms

AGM	Annual General Meeting
AGRI	BC Ministry of Agriculture
ALC	Agricultural Land Commission
ALR	Agricultural Land Reserve
ALUI	Agricultural Land Use Inventory
CSA	Community Supported Agriculture
DoS	District of Squamish
MIR	Meat Inspection Regulation
MOA	Market Opportunities Analysis
OCP	Official Community Plan
RGS	Regional Growth Strategy
SFN	Squamish First Nation
SLRD	Squamish Lillooet Regional District
SPCA	Society for the Prevention of Cruelty Against Animals
SSFPA	Small-Scale Food Processors Association
SVAP	Squamish Valley Agriculture Plan
SWOT	Strengths, Weaknesses, Opportunities, Threats

Acknowledgements

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Disclaimer Statement:

The government of Canada, the government of British Columbia and the Investment Agriculture Foundation of B.C. are pleased to participate in the production of this publication. We are committed to working with our industry partners to address issues of importance to the agriculture and agri-food industry in British Columbia. Opinions expressed in this report are those of the authors and not necessarily those of the government of Canada, the government of British Columbia or the Investment Agriculture Foundation of B.C.

1.0 Introduction

The purpose of this Market Opportunities Analysis (MOA) is to identify opportunities for agriculture to thrive and contribute to the economic sustainability of the Squamish Valley and region. This MOA report is based on research and stakeholder consultation to determine market-related challenges and opportunities, and to inform recommendations for the Squamish Valley Agricultural Plan (SVAP).

The SVAP project scope area includes Agricultural Land Reserve (ALR) lands within the District of Squamish and the Squamish-Lillooet Regional District (SLRD) Electoral Area 'D'.

The MOA was developed using the following sources:

1. Literature review and sector-specific data and research;
2. Responses from surveys (online and paper survey conducted in March 2019 and a handout distributed at the Squamish farmers' market in May 2019);
3. Discussions with members of the public and stakeholders at a project kick-off event in Brackendale in March 2019;
4. Results from one-on-one interviews with local key stakeholders in the agricultural community; and
5. Feedback from the SVAP Steering Committee.

This report is a working document and it is meant to be used in conjunction with the SVAP *Background Report* to provide important direction towards completing the final plan.

The MOA is structured using the following subsections:

1. Scope, engagement, and literature review
2. BC sector outlook and local food demand and supply
3. Infrastructure to support local market expansion
4. Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis
5. Market potential for different agricultural products
6. Success stories and resources
7. Conclusions and recommendations

1.1 Scope and Intent

It is intended that some of the issues and opportunities brought forth in this report will lead to recommended actions within the final SVAP. Project outcomes fulfilled by this MOA include:

- Identify and explore current issues and opportunities relating to agriculture.
- Identify opportunities that will support and enhance the economic sustainability and resilience of the agricultural industry.
- Identify strategies to take advantage of opportunities and mitigate challenges.

1.2 Stakeholder Engagement

Meaningful public engagement is crucial to the development of an effective SVAP. The engagement strategy was designed to be fair, inclusive, and considerate of differing perspectives.

The engagement strategy ensured that the expertise of the local government staff, technical resources from other stakeholders, and feedback from the community were incorporated into the process. To effectively engage the Squamish Valley community throughout the development of the SVAP, a number of strategies were used. These included the formation of a Steering Committee, a public kick-off event, online and paper-based survey, interviews, presence at a Squamish Farmer's Market, a presentation at the Ashlu Creek Foundation AGM, and a tour of the Upper Squamish Valley to meet with landowners. Efforts to engage with Squamish First Nation included outreach to members who are involved with community food projects and educational programs and attendance at an Elders Luncheon to discuss key priorities and opportunities. A full description of the engagement strategy is provided in the accompanying *Engagement Summary Report.*

1.3 Literature review

A number of reports and documents were consulted in developing this MOA. These include Statistics Canada Census reports, the Agricultural Census, background documents, as well as reports published by the Agricultural Land Commission (ALC) and BC Ministry of Agriculture (AGRI) documents. All data sources are listed as footnotes. The appendix provides a list of publications from AGRI including agricultural business development best practices which may be useful for producers and/or local governments and organizations.

2.0 BC Sector Outlook and Local Food Demand and Supply

This section highlights trends of the agriculture and agri-food sectors in British Columbia and the Squamish Valley region. Trends in consumer demand, employment, population, and income are presented to set the context for the market potential for agricultural crops and the strengths, weaknesses, opportunities, and threats (SWOT) analysis. Information regarding the biophysical environment (land, soil, water, climate), summary of the Agricultural Land Use Inventory (ALUI), as well as an overview of farming activity in the area is presented in the *Background Report*.

2.1 BC Agrifoods Sector Outlook

Agriculture in the Squamish Valley operates within the context of a provincial, national, and international marketplace. In 2017, BC's agrifood and seafood[1] revenues reached $14.2 billion, up 2.4% compared to 2016, and provided 61,100 jobs province-wide.[2] BC is a top producer of blueberries, mushrooms, greenhouse vegetables, farmed salmon, nursery plants, and floriculture within the Canadian context.

BC agrifood and seafood revenues were over $14 billion in 2016, generating over 60,000 jobs.

The province's food and beverage manufacturing sector generated $9.8 billion out of the $14.2 billion in agrifood sales in 2017. This points to the ability in BC to add value to raw food products through processing and manufacturing.

[1] British Columbia's (B.C.'s) agrifood and seafood industry includes primary production in agriculture, aquaculture, commercial fisheries and the processing of food and beverages.
[2] BC Agrifood and Seafood Sector. 2017. BC Ministry of Agriculture Annual Report.

Throughout all of BC there is a continued and growing interest in consuming local, BC produced foods. This is further supported by AGRI's Buy BC, Grow BC, and Feed BC initiatives,[3] which focus on expanding the domestic market rather than the export market for local foods.

The demand for local food is primarily influenced by BC residents' interest in supporting the local economy, coupled with a desire for food that is fresh and safe to eat.[4] Consumers also value transparency in where their food comes from and prefer products with a positive social impact, such as fair trade, environmentally safe (e.g. organic) and humane practices.[5] Eggs, fresh fruits and vegetables, and milk, are the most likely products to be sourced locally by consumers.

88% of BC residents purchase their food at large grocery stores.

Nearly two-thirds of those who frequent farmers' markets want to know the origin of the product, are interested in learning more about the producers and their values, and are seeking more direct way to make an impact in the local economy. However, the vast majority (88%) of BC residents are still purchasing foods at large grocery stores (supermarkets)[6] where the availability of local foods may be limited. Over 90% of BC residents would be more inclined to buy local products more frequently if the products were offered at competitive prices – in other words, there is a sense (either real or perceived) that local foods are too expensive for some consumers.[7] These trends in consumer preference align with the preferences of local residents in the Squamish region, as uncovered through engagement efforts and described in the following section.

2.2 Market Potential of the Squamish Valley and Surrounding Region

2.2.1 Population and Agriculture Employment Overview

The community overview provides context for the potential market base for purchasing local products and employment opportunities within the agriculture sector. The population of the Squamish Valley and surrounding areas in the Squamish Lillooet Regional District (SLRD) has slowly increased over time and is projected to continue this increase into the future (Table 1). The population within the District of Squamish has increased substantially, by about 50%, between 2001 and 2018. The population of SLRD Electoral Area 'D' increased by about 25% over the same timeframe. Over the next 20 years it is projected that the population within the SLRD will steadily increase to 57,800[8] by 2040.

Table 1. Population of urban centres and rural areas of the Squamish-Lillooet Reginal District[9].

Jurisdiction	2001	2006	2011	2016	2018
SLRD Total	34,675	36,639	39,540	43,951	45,393
District of Squamish	14,855	15,496	17,739	20,379	21,229
Whistler	9,515	9,799	10,340	11,746	11,901
Electoral Areas (Including SLRD Area D)	5,784	6,639	6,648	6,761	7,063
Pemberton	1,737	2,353	2,487	2,688	2,818
Lillooet	2,784	2,352	2,326	2,377	2,382

[3] Grow BC, Feed BC, Buy BC, 2019. BC Ministry of Agriculture.
[4] B.C. Agrifood and Seafood Domestic Consumption Study. February 2018. BC Ministry of Agriculture.
[5] Emerging Food Innovation: Trends and Opportunities. 2015. Agriculture and Agri-food Canada.
[6] Ibid.
[7] Ibid.
[8] Sub-Provincial Population Projections. 2018. BC Stats, Government of British Columbia.
[9] Demographic Analysis Section. December 2018. BC Stats Ministry of Job, Trade and Technology Government of British Columbia

Based on the 2016 Census, there were 7,699 private dwellings in the DoS and SLRD Electoral Area "D", with median household income[10] of approximately $89,000 and $96,000 respectively.[11]

It is estimated that the average cost of a nutritious food basket for a family of four in BC is just over $1,000 per month.[12] This compares well with figures for the Squamish area, where an average of $1,038 is spent on food per household per month.[13] As there are 7,699 households (with just under 3 people per household) in the region, approximately $8 million is spent on food by Squamish residents per month.[14] This highlights the potential market for regional food producers and processors.

Squamish residents spend a collective $8 million on food per month.

2.2.2 Employment Trends in District of Squamish and SLRD Area D

Over 1,000 workers commute from the Squamish area out to Whistler and the Lower Mainland of Vancouver on a daily basis.[15] Leading employment sectors within the DoS are retail, accommodation and food services, construction, professional scientific and technical services, education and healthcare.[16] Employment in agriculture and agrifood businesses, such as producing food, processing, manufacturing and packaging food, totalled only 133 in 2019 and is not a large proportion of the overall employment numbers in the region (Figure 1).

There has been a trend of increasing agriculture and agrifood jobs in Squamish (and the SLRD Area D, but to a much smaller extent) along with the general population increase. From 2012-2019 agriculture and agrifood jobs in Squamish increased from 73 jobs to 123 jobs (in SLRD Area 'D' the increase in jobs was 4 in 2012 to 10 in 2019).[17] The increase occurred in the categories of:

- Support activities for farms (general farm labourers and farm workers) (from <10 to 29);
- New bakeries (from <10 to 16);
- Beverage manufacturing (e.g. breweries and distilleries) (from 31 to 41); and
- Food merchant wholesalers (from <10 to 13).

In the District of Squamish and SLRD Area 'D' there were a combined 133 jobs in agriculture and agrifood in 2019.

Job numbers for speciality food stores have also increased, adding 89 jobs from 2014-2018,[18] indicating that there may be opportunities for small-scale producers to market their products to these retailers.

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[10] This is calculated as income before taxes.
[11] Median household total income and after-tax income by household type. 2016. Statistics Canada.
[12] Every two years the BC Centre for Disease control, in collaboration with the BC Health Authorities, measures the cost of food across the province. The measurement is based on a "National Nutritious Food Basket" which is a nationally used methodology for measuring food costs that describes the quantity of approximately 60 foods that represent a nutritious diet for individuals in various age and gender groups.
[13] Food Costing in BC 2017: Assessing the affordability of healthy eating. 2018. BC Centre for Disease Control.
[14] Assuming a household of three spends approximately $780/month on food. Does not include food purchased at restaurants.
[15] Data Analysis for Sector Recommendations. 2018. District of Squamish.
[16] Data Analysis for Sector Recommendations. 2018. District of Squamish.
[17] District of Squamish, Emsi Q1 2019 Data Set. Input-Output model.
[18] Ibid.

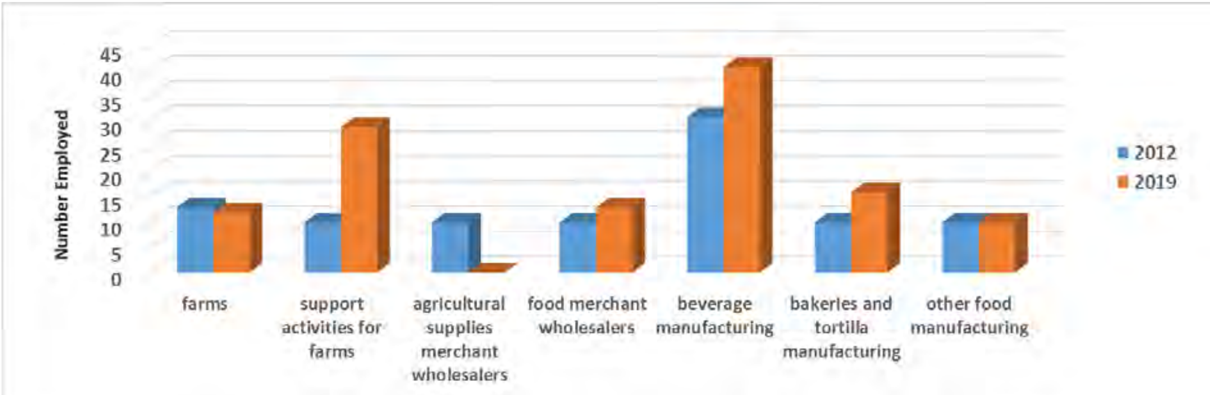

Figure 1. Changes in agriculture and agri-food employment in the District of Squamish from 2012 to 2019.

2.2.3 Support for Local Food

Local governments and individual community members in the Squamish Valley region support agriculture and food production. This is evidenced by the popularity of the Squamish Farmers' market, the results from the SVAP survey and kick off event. Engagement results indicate that there is a relatively high level of support from local consumers (56% of survey respondents), and that the public is relatively well-educated about the importance of local food security (32% of respondents).[19] These numbers indicate that opportunities exist to continue building awareness about the potential benefits of the local food sector.

Many members of the community are members of organizations that support local agriculture either directly or indirectly. The organizations in the Squamish Valley region that support agriculture and food initiatives include, among others:

- Ashlu Creek Foundation
- Brackendale Farmer's Institute
- Queen of Peace Monastery
- Squamish Climate Action Network
- Squamish Farmers' Market Society
- Squamish Food Policy Council
- Squamish Helping Hands Society

Support for local agriculture and food is also made clear through policies and regulations at the local level. The 2018 DoS Official Community Plan 2040 (OCP 2040) includes a priority focus on food systems with the aim to "enhance awareness and promote policies to "foster a more sustainable food system in Squamish".[20] Many of the policies are related to preserving the community's agricultural land base and creating a positive regulatory environment for food and farming.

The SLRD also strongly supports agriculture and local food systems, as is reflected in the 2013 Electoral Area 'D' OCP. The objectives include achieving "a healthy, sustainable, and stable food supply by working with food producers, citizens, First Nations, and governments to support local and regional food security and to encourage diversification, small farm development, and

[19] 46 people responded to the survey, this is a small representation of the larger population of Squamish and SLRD Area D.
[20] Official Community Plan Bylaw, 2017, No. 2500.

ecological and economic sustainability of the farming community". The SLRD's bylaws align closely with the Agricultural Land Commission Act (ALC Act) and associated ALR regulations.

The 2018 SLRD Regional Growth Strategy calls for several specific policy directions that support agriculture and food security. Policy directions include: supporting the economic viability of the local agricultural sector, supporting the development of a comprehensive, locally relevant, place-based approach to agritourism, and protecting and enhancing food systems.

2.2.4 Supply and Availability of Local Food and Farmland

Over 90% of the land within the ALR in the Squamish Valley is covered by forests and/or natural vegetation.

The majority of the ALR lands in the Squamish Valley are located in the SLRD Area 'D' (Figure 2) and are under the jurisdiction of private owners, the Crown (i.e. the Province of BC), or Federal Government (e.g. Squamish First Nation reserve lands) (Table 2). However, 93% (1,851 ha) of the private and Crown ALR is forested, or covered by other natural vegetation, which may need to be cleared for agricultural activities to be viable. These parcels represent potential for expanding agricultural activities in the Squamish Valley, and rangeland and grazing leases can be obtained for some Crown lands. Over 550 ha of privately-owned parcels in the ALR are classified as "available for farming"[21] based on the 2018 Agricultural Land Use Inventory (ALUI). This highlights the opportunity for potential expansion of agricultural activities either directly by landowners or by those leasing or renting farmland.

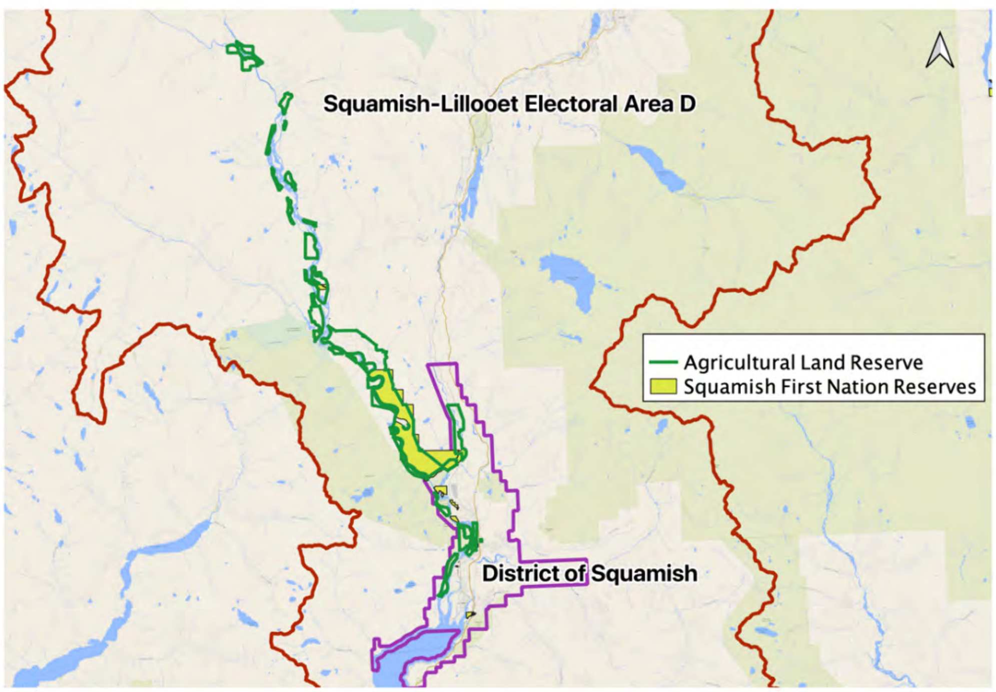

Figure 2. Agricultural Land Reserve in the Squamish Valley.

[21] Squamish Valley Agricultural Land Use Inventory, 2018. BC Ministry of Agriculture.

Table 2. Ownership of Agricultural Land Reserve in the Squamish Valley.

	Location		Total ALR Area (ha)
	District of Squamish ALR (ha)	SLRD Electoral Area D ALR (ha)	
Private & Crown Land	499	1,487	1,986
Squamish Nation Reserve	163	1,133	1,296

For more in-depth information on current agricultural activities and characteristics of agricultural land in the Squamish Valley, refer to the SVAP *Background Report*.

3.0 Infrastructure to Support Local Market Expansion

The profile of demand and supply presented in Section 2 points to an opportunity not only to diversify the types of crops and livestock being produced, but to do so using economies of scale and value-added processing. The proximity of essential farm services and supporting infrastructure for producers facilitates the success of agricultural enterprises. Currently, the Squamish area has a limited number of established support services and businesses for agricultural activities. This section of the report provides an inventory of current farm services, food businesses and supporting infrastructure in the Squamish Valley and surrounding region and identifies current retail options used by producers to market and sell their foods. Strategies and best practices to enhance agriculture and agri-food businesses and infrastructure are highlighted throughout.

3.1 Transportation and Distribution

The agricultural sector in the Squamish Valley relies on regional transportation linkages for accessing local, provincial, national and international markets. The highway and road systems are the main transportation modes used for shipping food products and agricultural inputs throughout the region. The main highway through the Sea-to-Sky region is Highway 99, which runs from Vancouver through to Lillooet, passing through the DoS with exits into the SLRD Area 'D' at Paradise Valley and Brackendale areas. The Squamish Valley Road is the only link for lands in the Upper Squamish Valley to reach Highway 99. Farmers typically move their own goods along these roads to processors/abattoirs, grocers, farmers' markets, and/or directly to consumers.

The closest international airport is Vancouver's YVR in Richmond, with small regional airfields in Squamish and Pemberton. A Canadian National rail track services the region and there is a deep-water port of entry into the DoS from Howe Sound, which is used primarily to ship forest and steel products.

There is a gap in distribution services for small and medium-scale producers who are interested in selling products beyond the farm gate or the farmers' market, but do not have the capacity or resources to distribute goods to Vancouver and beyond. Experiences in other regions in BC, Canada and North American have shown that various options exist for small-scale distribution of regional products.[22]

[22] Mittal, A., Krejci, C., & Craven, T. (2018). Logistics best practices for regional food systems: A review. *Sustainability*, *10*(1), 168.

Potential options for distribution that could be considered for the Squamish Valley region include:

- Use existing small and medium distributors as a pay-for-service to pick up and deliver food goods (dependent delivery system), or "piggy-backing" onto other delivery trucks passing through the community.
- Have a farmer or group of farmers purchase, lease, or rent a delivery van to manage their own distribution (consolidation of products to form an independent delivery system).
- Creation of a regional food hub and distribution service targeted towards consolidating, processing and distributing products from small-scale producers to markets.

3.2 Agricultural Input and Service Suppliers

There are a limited number of businesses in the DoS and SLRD Area 'D' that provide goods and services to farms. There are a small number of hardware stores such as Rona, Home Hardware, Canadian Tire, and a small supplier of hydroponic equipment that may provide some goods for general agriculture operational needs. However, bulk and/or wholesale purchase opportunities are rare. There are no locally-based agricultural equipment dealers, farm supply or livestock feed stores - the nearest are located approximately an hour away in Metro Vancouver and the Fraser Valley.

Over 95% of agricultural inputs and services are purchased from suppliers located outside the Squamish Valley.

Table 3 illustrates the gap that exists in the Squamish Valley for agricultural products and services. It is estimated that almost all of the agricultural inputs or services needed by businesses or individuals are purchased or accessed from outside the region. The potential value to be gained by businesses within the region if these gaps were filled is estimated at over $4 million. This data also implies that producers are incurring increase costs of transportation (and time) to access essential products and services for their agricultural businesses. While it may not be economically feasible or desirable to fill these gaps in services and products presently, Table 3 may point to areas where economic opportunities exist for future agricultural service businesses as farming activities increase in the region (e.g. opening a farm equipment supply store in the Squamish area).

Table 3. Gaps in agricultural input and service suppliers in the Squamish region. (Data source: Emsi Input-Output model 2015).

Agricultural Input and Service Suppliers	% of purchases imported from outside of the Squamish area	Estimated value of imported purchases
Pesticide, fertilizer and other agricultural chemicals	100.0%	$3,990,586
Agricultural supplies and merchant wholesalers (e.g. feed and seed suppliers)	90.5%	$152,198
Farm product merchant wholesalers (e.g. animal and plant/nursery stock suppliers)	100.0%	$212,021
Farm, lawn and garden machinery and equipment merchant wholesalers	99.5%	$27,329

3.3 Food and Beverage Processing and Manufacturing

Value-added products can provide much higher returns for producers than simply selling raw goods. For produce, taking the extra step of canning, dehydrating, or creating a new product with a long shelf life (e.g. salsa) can also provide income over the entire year rather than only providing a return during the harvesting months that selling raw goods provides.[23] As mentioned, there has been an increase in bakeries and craft beverage manufacturing business in Squamish over the past 7 years which may provide a market for local farm products. Results from stakeholder engagement indicated that some producers may individually undertake small batches of value-added food processing (e.g. honey, preserves, soaps, meat processing)[24]. Several vendors at the Squamish Valley Farmers' Market are selling preserves, spices and dressings, and jams but it was unclear if their primary ingredients are being sourced locally.

There are a limited number of medium- to large-scale food processing and manufacturing businesses in the Squamish Valley region. Table 4 illustrates the gap that exists in local processing and manufacturing for food products. It is estimated that almost 80-100% of all the processing and manufacturing needs by businesses or individuals are accessed from outside the SLRD. The potential value to be gained by the Squamish region if these gaps were filled is estimated at nearly $4.5 million.

The value of food processing and manufacturing services needed by local producers is nearly $4.5 million.

It may not be economically feasible or desirable to fill these gaps presently, for example, there are no dairy farms in the region to warrant a dairy product manufacturing facility. However, Table 4 may point to areas where opportunities exist for future food processing and manufacturing businesses.

Table 4. Gaps in food processing and manufacturing in the Squamish region. (Data source: Emsi Input-Output model 2015).

Food Processing and Manufacturing	% of purchases imported from outside of the Squamish area	Estimated value of imported purchases
Grain and oilseed milling	84.9%	$2,222,134
Sugar and confectionery product manufacturing (e.g. chocolate, candy, candied fruit, etc.)	55.2%	$508,873
Fruit and vegetable preserving and specialty food manufacturing	97.3%	$395,120
Dairy product manufacturing	99.3%	$253,028
Meat product manufacturing (e.g. abattoirs, cut & wrap shops)	100.0%	$234,882
Other food manufacturing (e.g. snack foods, nuts, teas, spices/dressings, etc.)	91.4%	$862,170

[23] Stott, D., et al. 2013. *Report #3: Potential Demand of North Fraser and Lower Mainland Agricultural Product*. Pitt Meadows Economic Development Corporation.
[24] Three out of 12 farmer respondents in the survey indicated they participate in some value-added activity of their products.

As Table 4 illustrates the lack of local abattoirs represents a considerable gap in the supply chain for Squamish Valley meat producers.[25] The changes to the *Meat Inspection Regulation (MIR)* in 2004 have limited the slaughter options available to small-scale meat producers and in most cases animals must be transported into the Metro Vancouver and Fraser Valley regions for processing. Some local producers are taking animals as far as Vancouver Island for processing.

The following Class A licensed facilities (which permit both slaughter and meat processing) are closest to the Squamish Valley:[26]

- Meadow Valley Meats (*Cows/Cattle),* Pitt Meadows, BC *(120km)*
- AGM Beef Farm Ltd, (*Cattle/Sheep/Lamb/Goat/Llama),* Surrey, BC *(120km)*
- Sumas Mountain Farms, *(Cattle, Hogs),* Abbotsford, BC *(160km)*

The following Class B licensed facilities (which only permit slaughter) are the closest to the Squamish Valley:

- Garrett Broach (*Chicken),* Langley BC *(130km)*
- Las Palomas Farms, *(Poultry)*, Chilliwack, BC *(160km)*

However, despite the relative proximity many of these facilities are operating at full capacity. Small producers without a large supply of animals do not take priority when scheduling operations. As such, many are placed on a "wait-list" which hinders animal husbandry needs as well as animal welfare. A Class D licence allows on-farm slaughter of 1-25 animal units[27] for direct sale to consumers or retail sales to secondary food establishments (for example, 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. It is believed that there are a few Class D licence holders in the Squamish Valley, although the exact number is unknown.

Resources and industry groups exist within the province to assist small-scale producers if they desire to increase their value-added product offering. The Small-Scale Food Processors Association (SSFPA) has a comprehensive resource list[28] for all of its member processors, as well as services to support new processors. Local governments and non-governmental organizations are providing access to community kitchens for producers to provide food safety certified equipment for use on a rental basis. For example, the Commissary Connect facility in Vancouver provides

Success Story: Local Abattoir

Located on Saturna Island, Campbell Farm has been producing beef since 1945 and lamb since 1960. The farm constructed an abattoir in 1959 to meet the meat inspection regulations at the time. It has since been upgraded to meet current regulations and operates as a Class A facility. The farm mainly raises its own animals for processing, and custom cut and wrap of beef and lamb. Products are marketed to local businesses on Saturna, including the café and the Saturna General Store. The annual Saturna Lamb Barbeque also provides an opportunity for Campbell Farm, and other Gulf Island lamb producers, to market a good quantity of lamb. The abattoir also provides some custom slaughter services for lamb and beef for producers on Mayne, Galiano, and Pender Islands. The abattoir is a member of the BC Association of Abattoirs and the farm is a member of the BC Sheep Federation. The abattoir is also part of the Premium BC Lamb program and is able to score lambs for quality. More information can be found here: http://bcabattoirs.org/member/campbell-farm/.

[25] Data Analysis for Sector Recommendations. 2018. District of Squamish.
[26] Class A & B Licences. 2019. British Columbia Ministry of Agriculture.
[27] One animal unit means: combined weight, when measured alive, of 1,000 lbs (454 kg) of meat.
[28] Small Scale Food Processors Association resources https://www.bcfpa.ca/membership/members

food businesses with rental access to a certified kitchen and dry and cold storage using an online booking system.[29] These can be great resources for small businesses who are testing out new products on the market and are unsure as to whether or not to purchase their own processing equipment.

3.4 Product Storage Options

The ability to store products for market will impact both the mix of products that can be offered and the types of target sectors that can be reached by farmers at an individual and collective level. Storage can take several forms, including dry, refrigerated, and/or frozen. While some vegetables, such as onions, garlic, and carrots only require dry storage, others such as leafy greens, cucumbers, and berries will require refrigeration if stored more than one or two days.[30] Frozen storage is the best option for those who are processing goods into value-added items (e.g. smoothies, sauces, soups). Storage options come in all sizes, and most farms have some level of dry or cold storage as part of their operations through the use of cellars or coolers. Some producers may already have cold storage needs that extend beyond their farms' capacities at certain times of the year, as these products are harvested all at once and the excess must to be frozen for sale throughout the winter months. For example, in July, August and September when daytime temperatures can climb, additional cold storage may be needed for produce. And in the winter months, more freezer storage may be needed for frozen produce or meat.

There are limited to no storage facilities, dry, refrigerated or frozen, in the Squamish Valley available for producers to access. Due to the low volumes of products grown and produced in the Squamish Valley at this time, options for feasible product storage facilities are limited. Small-scale options such as several producers consolidating products to lease a storage facility together may be desirable by current producers. Options such as a regional food hub may become more feasible as volumes of local products increase in the Squamish Valley and surrounding regions.

3.5 Local and Regional Retail Options

According to research and community input, the majority of the Squamish Valley farms sell their food locally, within the Squamish community (results of the survey show that 9/10 farmers, who participated in the survey, sell locally). Products are occasionally sold within the Sea-to-Sky corridor (e.g. Whistler) and within Vancouver (Figure 3). Producers are selling their products mostly at farm gate and at farmers' markets (Figure 4).[31] These are further discussed below.

[29] Commissary Connect: https://commissaryconnect.com/
[30] Anecdotal, based on interviews with local farmers and retailers.
[31] Results from SVAP Survey.

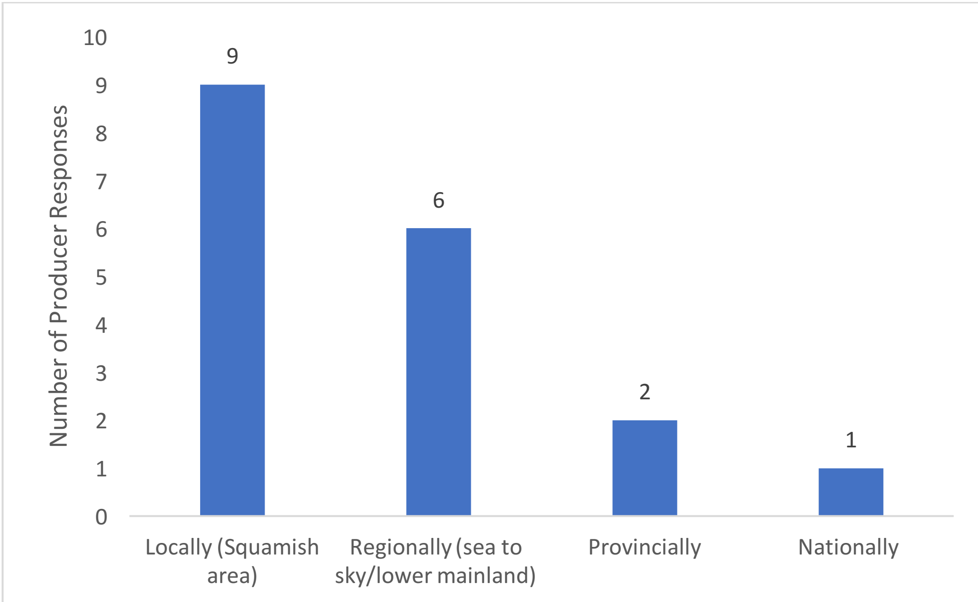

Figure 3. Areas where farm products are sold by farmers (10 farmers responded to the survey, indicating some farmers sell at multiple scales).

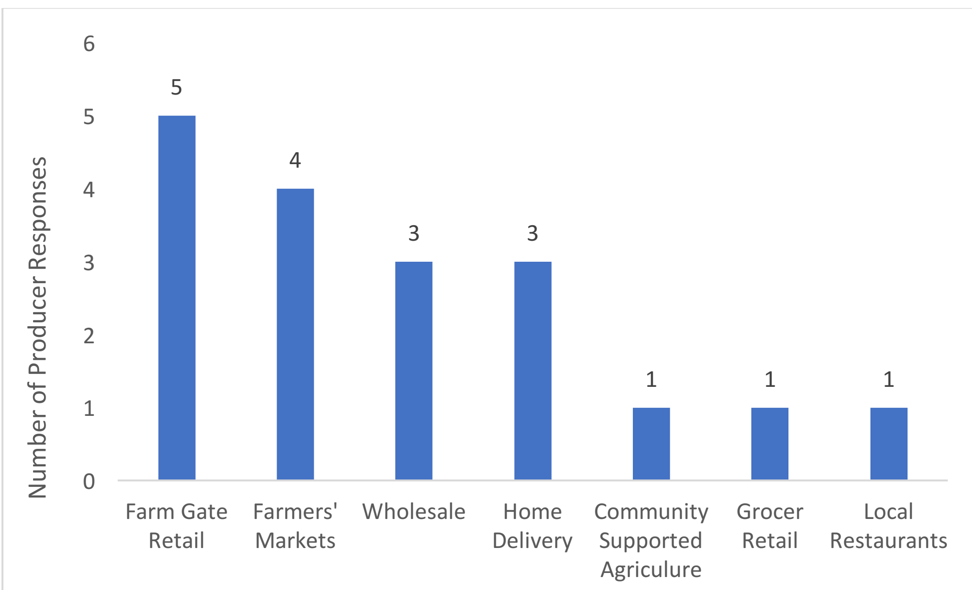

Figure 4. Sales channels of Squamish Valley farmers (11 farmers responded, indicating some farmers sell their products through multiple channels).

3.5.1 Wholesale and Grocery

Local grocery, specialty food stores and restaurants present an opportunity for local producers to sell their products. Within Squamish, Nesters Grocery has been very supportive of stocking shelves with local products. Often small and medium-scale grocers can accept products and allocate shelf space with greater flexibility than larger retailers. With the increase in speciality food stores observed in Squamish over the past several years, opportunities may be present for producers to sell their products locally. Successful partnerships with grocers and local producers depend on strong relationships and flexibility by both parties on their terms of business. Packaging and labeling requirements can present a barrier for some small-scale producers from selling through grocery stores, however wholesale is unlikely at the levels of production currently occurring within the Squamish Valley, as it requires larger volumes over a consistent timeframe and pricing arrangement.

Success Story: Online Marketplace

The Cowichan Valley Cooperative Marketplace (CVCM) in partnership with Cowichan Green Community established the Cow-Op.ca. The CVCM is a non-profit cooperative made up of local farmers, business owners, and community partners. As part of the development of a food hub in the region, it was decided that an online marketplace would be a good first step to promote food sustainability, farm viability, and consumer access to local food in the Cowichan region. The Cow-Op marketplace features a variety of produce, meat, eggs, seafood, cheeses, honey and more that are grown and produced throughout Cowichan. The service is open to anyone, including retailers and wholesalers and the system accepts VISA and Mastercard for ease of use. The market opens every Friday at noon and closes Tuesday at midnight. The orders are emailed to the farmers on Wednesday morning and delivered to the pick-up location on Thursday morning. Any orders that are not picked up are donated to the local Food Bank or Soup Kitchen. More information about the Cow-op can be found at: http://www.cow-op.ca/.

3.5.2 Institutions

While institutions can provide purchasing contracts for large quantities of goods, it can be challenging to access this market. With the *Feed BC* initiative recently launched by the Province, an opportunity may arise for individual or collective farmers to enter into a purchasing agreement with local hospitals or other institutions in the future.[32] The Squamish Food Policy Council is developing a Regional Food Procurement Policy, due for completion at the end of 2019. If adopted, this policy may provide local market opportunities for Squamish Valley producers in the future.

3.5.3 Restaurants

Restaurants are a traditionally challenging sector for farms to access on a regular basis. While restaurants carry the promise of good prices and opportunities to showcase individual farms and specialty products, the relationship between chef and farmer can take a lot of effort and time to be established. Orders must often best placed in person and deliveries can be extremely time-sensitive. Some farmers in the Squamish Valley indicate they have sold small amounts of eggs and meats to local grocery stores and restaurants, particularly to Whistler and Vancouver.[33] Additional opportunities exist for farmers in the Squamish Valley to sell their products to local restaurants, particularly West Vancouver and North Vancouver as they are closer in proximity to the Squamish Valley. However, each restaurants requirements vary and therefore this will likely need to occur on a case-by-case basis or through an established grower's cooperative (see text box).

[32] Feed BC, BC Ministry of Agriculture.
[33] Results from SVAP Survey.

3.5.4 Direct Sales

Over 40% of small-farms in BC (farms with less than $10,000 in gross farm receipts) reported selling food products directly to consumers in the 2016 Census of Agriculture.[34] Farm gate retail is the predominant method Squamish Valley farmers use to sell their products. Producers also sell at the Squamish Farmers' Market and through home delivery (Figure 4).[35] The Squamish Farmers' Market is in its 15th year of operation and runs every Saturday from April to October outside in downtown Squamish; in previous years it has moved to the Squamish Adventure Centre during winter months. One challenge identified by local producers is a lack of a consistent year-round location for the farmers market with indoor capacity during inclement weather. Some producers currently travel to the Lower Mainland to sell at Vancouver farmers' markets as they are able to fetch better prices and can be assured of consistent sale volumes.

Success Story: Direct Marketing and Retail

Merville Organics Growers' Cooperative is located in the Comox Valley and is a cooperative of four growers. All farms are certified organic and sell mainly through the Comox Valley farmers' market, a veggie box program, and Vancouver Island restaurants. Merville Organics began when Amara Farm and Ripple Farm were first starting to grow in the Valley. They were not producing enough product on their own farms to supply the local market. They decided to combine forces to share marketing efforts and increase efficiencies in other aspects of their production such as labour, tools, and input purchases. The majority of the income is derived from sales to restaurants in Tofino. More information about Merville Organics can be found here: http://mervilleorganics.ca/.

Community Supported Agriculture (CSA), commonly referred to as a "veggie box program" is an alternative, locally-based economic model of agriculture and food distribution that focuses on a network or association of individuals who have pledged to support one or more local farms by purchasing an annual membership in exchange for delivery of weekly boxes of produce, eggs, and/or meat products. Only one producer in the Squamish Valley indicated they sell their products through a CSA. As the population in Squamish continues to grow, this presents an opportunity to increase the number of producers who use the CSA retail model. Options also exist for multiple producers to work together to provide a range of products for CSA members, which may increase demand for food boxes.

Agri-tourism is a strategy becoming increasingly common with producers as a way provide a value-added experience to consumers and increase profit margins. One producer in the Squamish Valley indicated they currently include agri-tourism activities on-farm while four producers indicated they have no agri-tourism activities currently but are interested in pursuing them.[36] There are many option for agri-tourism activities that are permitted by the Agricultural Land Commission as long as they are secondary to the primary use of the land, which must be agriculture. These activities include farm tours, U-Pick promotions, Slow Food Cycle Tours, Chef Tours, Farm Crawls and more. More discussion with producers and local food organization are required in order to determine which farm businesses are interested in adding this revenue stream to their operation. Agri-tourism activities must also consider the regulations of these activities in the ALC Act if on ALR land and any local bylaws.

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[34] Statistics Canada.2017. Farm and Farm Operator Data.
[35] Ibid.
[36] Results from SVAP Survey.

4.0 Analysis: Strengths Weaknesses Opportunities Threats

This Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis (Table 5) summarizes the findings of the *Background Report* and this report. The strengths and weaknesses are internal factors that farmers and local governments have some control over. The opportunities and threats are external influences that local residents and agencies have little control over but need to be considered for feasibility of agricultural opportunities. Strategies to address the weaknesses and threats will be presented in the final Squamish Valley Agricultural Plan.

The topics impacting the agriculture and food sector in the Squamish Valley region were identified and categorized as follows:

- Environment (climate, soil, water)
- Production (landbase, farming practices, labour)
- Processing (value-added products)
- Distribution (transportation networks, storage)
- Retail and Marketing (direct sales, grocers, restaurants)
- Community Engagement (partnerships, support, education)

Table 5. SWOT Analysis for Squamish Valley Agricultural Market Opportunities.

Topic	Strengths	Weakness	Opportunities	Threats
Environment	• Water access for irrigation • Good water quality • Many producers using organic/sustainable production methods • Soil is good quality in the valley	• Land clearing must occur on most sites to increase production potential • No diking infrastructure to protect farms from flooding • Lack of dogs leashed in rural areas (harass livestock)	• Climate change may increase growing degree days and the diversity of what can be grown in the region	• Climate change may increase flooding, fires and drought • Current and historic flooding, leads to crop loss, debris flow • Wildlife conflicts (eagles, coyotes, elk, bear) • Invasive species
Production	• Core base of established farmers • Land base is mostly available for farming • Hops production is well established	• Lack of compliance and enforcement over non-farm use of ALR • Lack of seasonal labour • Lack of leasing opportunities • Small parcel size over some of the ALR • Lack of locally-available feed for poultry and livestock	• Relative proximity to customers and large markets • Forested farmland allows for unique production methods and foraging • Skill development resources from provincial government • Young Agrarians and other land-linking support	• Many producers must work off-farm to make ends meet • Challenges to increase farming production on private land • Growing season shorter than some areas of BC

Topic	Strengths	Weakness	Opportunities	Threats
Processing	• Some processing and value-added already occurring locally: breweries, bakeries, soaps, syrups	• Lack of local abattoir or cut/wrap butcher shop with year-round availability • Lack of food safe kitchens and cold storage • Lack of individual carrying capacity to warrant investment in processing facilities	• Provincial funding for food hub feasibility studies • Federal funding initiatives for food processing infrastructure • Several food hubs on Vancouver Island, Interior, and Kootenays are building capacity (learning opportunity)	• Meat Inspection Regulations and existing abattoir licensing options • Larger out-of-region producers receiving priority when booking processing services
Distribution & Storage	• Short distribution distances to larger markets • Easy to distribute goods to the Squamish Farmers' Market	• Lack of shared distribution vehicles • Lack of local cold or dry storage options • Not enough coordination between various players	• Existing truck sharing programs in Lillooet and other communities offer learning opportunities	• High costs of delivery trucks, other investment needs • Distribution system to grocery stores and restaurants tailored to big producers
Retail & Marketing	• Relatively close to large, ethnically diverse markets in Whistler, Vancouver and the Fraser Valley • Existing support from some local retailers (e.g. Nesters) • Sea-to-Sky farmers have created a great name for high quality locally grown food	• Lack of stable relationship with local restaurants and cafes • Lack of direct visits to farms for farm gate purchases • Purchasing food mainly happens at large grocery stores	• Trend towards institutional (e.g. schools, hospitals) procurement of local foods • Restaurants appear interested and open to purchasing local ingredients • Consumers are looking for specialty products	• Competitive prices from imported goods • Competition with well-known provincial and national brands • Lack of flexibility by larger retailers around shelf space for small-scale, locally-produced foods
Community Engagement	• Squamish Food Policy Council • Strong demand for local food • Strong community garden presence • Cultural history and potential to strengthen Squamish Nation partnerships	• Not as much locals purchasing local food at the Squamish Farmers Market (lots of tourists) • Lack of engagement with Squamish First Nation	• Provincial funding for Farm-2-School and other educational programs to link to local farms • Local, regional, provincial, federal support for food security initiatives	• Difficult to obtain community buy-in when other issues are at the forefront (e.g. climate change, education, politics).

5.0 Suitability of Agricultural Market Opportunities

According to the Census of Agriculture and the ALUI, horses, hay, beef cattle, and greenhouse production are the most common forms of production in the Squamish Valley, representing over 80% of cultivated farmland. Other significant crop types identified by the ALUI include small amounts of hops, vegetables, fruit trees, mixed berries and tomatoes. Specialty crops, such as mushrooms, are also being produced in small amounts in the Squamish Valley area.[37] Some vegetables, berries, and eggs are being sold locally through the farmers' market and other channels such as the farm gate.

Livestock identified by the ALUI included small-scale sheep, hogs, and poultry. Beef cattle were found on 13 properties, with a total of approximately 30 cattle. No intensive or high-density livestock or poultry production is occurring. As there are no licensed abattoirs in the Squamish Valley area, meat and poultry must be processed at facilities in the Lower Mainland, Vancouver Island, or on-farm for personal consumption. For example, Stony Mountain farm in the Squamish Valley have their pork processed in Errington (outside of Nanaimo) and then returned with the product to sell at the Squamish Farmers' Market and online.

As described in the SWOT, other limiting factors in the suitability of agricultural opportunities include the lack of long-term leases or land ownership by farmers, challenges and costs associated with land clearing, and risks associated with flooding. As is most often the case in other regions of BC, large capital investments will be required to develop a viable agricultural business in the Squamish Valley. Therefore, incorporating some degree of value-added products (through processing), agri-tourism and/or direct farm sales will also make a farm operation more economically viable.

Despite challenges associated with agricultural production in the Squamish Valley, several opportunities for new farming endeavours do exist. A high-level feasibility assessment is provided in Tables 6 and 7 on the following pages. The assessment provides an overview of potential crop and livestock production scenarios and includes a ranking of relative costs of start-up for a new business, and the relative return on investment, as follows:

- **Considerations**: These include a description of the Squamish Valley's soil, climate, and other infrastructure requirements specific to the proposed crop or livestock.
- **Relative cost of start-up**: A simple ranking of Low, Medium, or High and compares the relative capital investment requirements (e.g. infrastructure, plants, animals) in relation to the other opportunities included in the assessment.
- **Relative return on investment:** A simple ranking of Low, Medium, or High and compares the relative gross farm receipts that can be reasonably expected for each of the opportunities, based on average yields and sales data[38,39] (note that this is only a relative ranking and should not be inferred as detailed business planning advice).
- **Suitability ranking:** A simple ranking of Low, Medium, High is used based on weighing the considerations, relative cost of start-up, and relative return on investment for each potential crop and livestock opportunity.

[37] Artisan Farm Mushrooms in Squamish. June 2019, p.37, Country Life in BC.
[38] Kwantlen Polytechnic University. 2015. Enterprise Budgets.
[39] BC Ministry of Agriculture. 2013-2015. Planning for Profit Enterprise Budgets.

Table 6. Crop suitability assessment for the Squamish Valley.

Crop		Considerations	Relative Cost of Start-Up	Relative Return on Investment	Suitability Ranking
	Forage, hay, grass	There is a local need for good quality hay. The number of hay rotations per year may be influenced by flooding. Large equipment may be required.	Medium	Medium	High
	Root Vegetables (potato, onion, carrot, radish, beets)	Soil and climate are well suited to vegetable crops. If small and medium scale, then no large machinery required. Irrigation required. Some crop loss due to seasonal flooding may occur. Susceptible to bird, deer impacts. Annual soil fertility testing and nutrient program is recommended.	Medium-Low	Medium	High
	Green vegetables (lettuce, celery, cabbage, broccoli, spinach, herbs)	Soil and climate are well suited to growing greens. Susceptible to bird, deer impacts. Fairly easy crops to transport. Irrigation will be required.	Medium-Low	Medium	High

Crop		Considerations	Relative Cost of Start-Up	Relative Return on Investment	Suitability Ranking
	Strawberries	The climate is well suited to strawberry production. If the threat of flooding is of concern, the strawberry plants can be grown in raised beds, or in hoop-houses on elevated areas. May require some expertise in integrated pest management in order to achieve the best possible yields. May require netting or other bird deterrents.	Medium	Medium	High
	Traditional crops (nettle, elderflower, currants, gooseberries, blackberries)	Connections to traditional foods and foraging opportunities. Easy to develop value-added products (e.g. juices, jams). Currant bushes will need irrigation to become established. Opportunities to partner and/or support Squamish Nation business endeavours.	Medium - Low	Medium	High
	Specialty mushrooms	Niche market, may be easy to dry and transport to other markets. If grown on logs, production and harvesting typically staggered over a 4-6 year cycle for some mushroom varieties. If grown on processed substrate, production and harvesting time can occur many times a year.	Medium - Low	High	High

Crop		Considerations	Relative Cost of Start-Up	Relative Return on Investment	Suitability Ranking
	Hops	Can be sold fresh (wet) or dry. Requires deep soils for rooting; prone to fungal diseases. Establishment may be costly, with trellising required. Can be labour-intensive during the harvest season. Hops farms already established in region; long history of hop farming in Squamish.	High	High	High
	Christmas trees	Requires long-term investment as it takes several years for the first crop to mature. Perennial crop, therefore best to avoid planting within the floodplain. Either that the customers conduct a U-pick or the transportation/distribution costs may be high.	Low	Low	Medium
	Fruit trees	Demand from the local cider producers for local fruit . May be susceptible to fungal pressure. Pollinators will be required and pests such as birds may require netting or other deterrents. Would require long term lease or land ownership. .	High	Medium	Medium

Crop		Considerations	Relative Cost of Start-Up	Relative Return on Investment	Suitability Ranking
	Hoop-house vine crops (tomatoes, sweet peppers, cucumbers)	Hoophouses will allow for better daytime high temperatures. These vine vegetables are highly susceptible to frost and require advanced knowledge of crop to produce an optimal yield. Will need to sell at the farm gate or at a farmers' market in orde r to fetch the best possible price returns.	High	Medium	Medium
	Field flowers	Would likely sell well locally or at a farmers' market. Perennial bulbs should be grown outside of the floodplain. High water tables may result in poor yields or disease. Pests such as insects and birds may require mitigation.	Medium	Medium	Medium
	Pumpkins, zucchini, squash, melon	Pumpkins and other squamish are well suited to the climate. A pumpkin patch could be a tourist attraction.	Medium-Low	Medium	Medium

Crop		Considerations	Relative Cost of Start-Up	Relative Return on Investment	Suitability Ranking
	Cannabis and/or Hemp	Both require a Health Canada cultivation license. Security requirements for cannabis. Requires soil-based production within the ALR. High start-up costs in a floodplain may not be a good business investment.	High	High	Low
	Blueberries	Intensive site preparation may be required. Drainage infrastructure required. Not suitable for areas susceptible to spring or fall flooding.	High	Medium	Low
	Cereal grains: Barley Wheat Rye	Requires deep water table and large land areas. May require investment in combines, tractors, and other large equipment. Due to flooding and wet conditions in spring, using large equipment could delay plantings.	Medium	Low	Low
	Wine grapes	Takes many years to establish. Requires low water table (drainage required). Irrigation required. Prefers hot & dry climatic conditions. Susceptible to early and/or late frost.	High	High	Low

Table 7. Livestock suitability assessment for Squamish Valley.

Livestock and Poultry		Considerations	Relative Cost of Start-Up	Relative Return on Investment	Suitability Ranking
	Honey bees	Bees can be susceptible to disease and hive die-offs. Local beekeepers and knowledge base exist in region.	Low	Medium	High
	Poultry (small to medium scale, free range)	Coops, shelters from predators, fencing, drinking water, and heating will all need to be considered. Requires abattoir meat processing. Location of coops or barns should be built on high areas to avoid risk of flooding. High transportation costs for feed.	Low	Medium	High
	Sheep and goats (small to medium sized flock)	Local sheep and goat herds, knowledge base already exists. Requires barns, drinking water, and heating for shelters. Grass, hay, alfalfa, or other forage crops for grazing. Potential for agro-forestry or silvopasture opportunities for to reduce land clearing costs.	Low	Low	High

Livestock and Poultry		Considerations	Relative Cost of Start-Up	Relative Return on Investment	Suitability Ranking
	Hogs	Requires barns, drinking water, and heating for shelters. Potential for agro-forestry or pigs to be raised within the forest environment. Opportunities for specialty pork, such as free range and value-added products such as soap.	Low	Low	High
	Beef cattle	An opportunity exists to move towards small-scale operations with exotic or niche breeds to increase value. Requires abattoir meat processing. Potential for agro-forestry grazing to reduce land clearing costs.	Low	Low	Medium
	Llamas, alpacas	These animals can help to keep predators away from livestock. Opportunity to produce fibre. Fencing, barns, drinking water, and shelters will all need to be considered. Not as in-demand as other livestock products.	Medium	Low	Medium

Livestock and Poultry		Considerations	Relative Cost of Start-Up	Relative Return on Investment	Suitability Ranking
	Dairy cows	Opportunity to establish a small dairy processing facility with a focus on specialty cheeses. Approximately 25 acres of grass/hay production is typically required. Quota system may need to be purchased for new dairy production.	High	Medium	Low

6.0 Best Practices and Recommendations

The research and analysis conducted in this *Market Opportunities Report* and the *Background Report* provide direction for recommendations that can help the agriculture and agrifood sector of the Squamish Valley region thrive into the future.

The case studies highlighted throughout the report and in Appendix A point to best practices and opportunities in production, processing, agro-tourism and distribution for current and future farm businesses in the Squamish Valley.

Best Practices for Production:

- Partnering with local businesses that have useful by-products can reduce business input expenses (e.g. woodchips as substrate to grow mushrooms, spent brewery grains to make bread).
- Finding a niche product that is in demand locally and regionally is a successful business strategy.
- Obtaining certifications such as “Certified Organic” or “BC SPCA Certified” may provide extra value to products.

Best Practices for Processing:

- Working with existing organizations such as the Small Scale Food Producers Association can help reduce the regulatory burden associated with obtaining an abattoir license. This service would fill a gap in local meat processing and may allow regional farmers to keep more revenue from meat sales due to reduced transportation costs.
- Small-scale processing on-farm of a variety of products (e.g. cheeses, soaps, animal hides) provides farmers with products for different consumer demands.

Best Practices for Agri-Tourism:

- Providing unique activities for agri-tourism (e.g. on-tap milk dispenser, animal interactions, cheese making workshops, etc.) can draw in more sales and community awareness of farm products.
- Members of the public are particularly interested in a diversity of agri-tourism experiences, particularly innovative farming methods.

Best Practices for Distribution:

- Partnering with other farm and food processing business to collaborate and share distribution costs can be successful.
- Examples of templates for multi-farm partnerships for CSAs or farmers’ markets exist throughout BC.

The recommendations below are intended to be used as a strategy to support individuals, businesses, community groups and governments to strengthen and protect agriculture and the food system while enhancing community economic and environmental sustainability. They are intended to be incorporated into the final SVAP.

Market opportunity recommendations:

1. *Establish a formal group to represent Squamish Valley producers and processors:* An organization (such as a Farmers Institute, co-operative, or non-profit society) to represent local producers and processors can act as a liaison to local and provincial governments and support fundraising initiatives to benefit the sector.

2. *Strengthen partnerships between farmers and restaurants:* Formulate partnerships between farmers and restaurants, both within Squamish and in Whistler and Vancouver, to improve communication, promote contract growing opportunities, and identify and access distribution opportunities.

3. *Conduct a food hub feasibility study:* Apply for funding to conduct a feasibility study for a local Squamish Valley food hub (or SLRD regional food-hub). This will help to determine food hub model that best fits local context. A hub can lessen costs and efforts around purchasing supplies (such as feed) and other inputs. Aggregating products for distribution through a hub can also allow for more opportunities to sell to institutional buyers.

4. *Find solutions for meat processing:* Work with local meat producers to organize a meeting with representatives of provincial agencies to find solutions to the regional need for meat processing. This could include investigating a co-operative approach to developing an abattoir. Efforts could be combined with other groups and representatives (e.g. Small Scale Meat Producers Association).

5. *Identify solutions to improve product distribution:* Facilitate dialogue with producers in the Squamish Valley and surrounding region to determine effective distribution channels for local food and agricultural products.

6. *Determine the needs of food processors:* Organize a meeting for farmers and food processors to determine potential opportunities for farmers to supply local food processing businesses with key ingredient inputs (e.g. breweries, bakeries, soaps, essential oils, syrups).

7. *Create a "Made in the Squamish Valley" branding strategy:* Develop and implement a marketing strategy that will help purchasers (both locals and visitors) identify local Squamish Valley products. This will result in improving consumer awareness both locally and wherever Squamish Valley products are sold.

8. *Promote social media support for local products:* Local government, organizations, and businesses can use their online presence to show their support for local products and local producers through social media, websites, and other digital platforms.

9. *Support local procurement initiatives:* Create opportunities to bring more local food into local institutions (e.g. schools, health centres, community events, etc.) by supporting the Squamish Food Policy Council's Regional Food Procurement Policy. This can be combined with the Province of BC's FeedBC initiative.

10. *Identify a location for a permanent year-round Squamish Farmers' Market:* Explore year-round outdoor covered space or indoor farmers market venues for selling and accessing local food and agricultural products.

11. *Support producers interested in agri-tourism initiatives:* Work with the Ministry of Agriculture and the ALC to support business development initiatives for agri-tourism. This could include the development and/or distribution of brochures and other communications materials that clearly outline the rules and regulations associated with agri-tourism, agri-tourism accommodation, B&Bs, weddings, and other gathering events.

Appendix A – Best Business Practices

The following case studies are examples of innovative and successful farm businesses throughout BC that can inform local Squamish Valley ideas and practices. Similar opportunities in Squamish exist for the production of niche products for local and regional markets, collaborations between farms for ease of marketing/selling products and unique agro-tourism experiences.

Niche Products

Mushrooms

What the Fungus is a seasonal, specialty mushroom business based out of Summerland BC that offers a variety of gourmet mushrooms to local restaurants and farmers' markets throughout the Okanagan. The farm has been operating for six years and started from a partnership with a local tree care company providing woodchips as the substrate for mushroom growing. They also partner with farms in the area to provide mushrooms in CSA boxes. Mushrooms are grown in greenhouses and they have also developed a laboratory facility to undertake research and development activities related to the growth and propagation of both local and exotic species. The farm business offers weeklong mentorship programs to educate students with the knowledge and skills in mushroom cultivation. Their mission statement is "To produce fresh, seasonal indigenous and exotic mushrooms that are locally and economically grown using environmentally sound growing practices so that we can offer exceptional value to our customers and end users. We strive to make a difference in the community through job creation, education programs, reusing urban by-products, and sponsorship at community events".More information about What the Fungus can be found here: https://www.wtfmushrooms.ca/

Organic Beef

Windhorse Farm is a certified organic beef farm located in the Cowichan Valley on Vancouver Island. The farm has a niche product as they raise Red Angus cattle on a grass-fed diet, which is certified organic and certified by the BC SPCA as meeting their standards for humanely raising and handling beef cattle. They are breeding moderate-sized beef that do well on a grass-finished diet. The farm allows the cows to fully mature on site so fat and marbling in the muscle occurs to improve taste. The beef is sold through a partner farm at their farm gate store and farmers' market stand, at a specialty grocery store in Victoria and through a home share delivery program in Victoria. More information can be found at: http://www.windhorseorganics.ca

Specialty Cheeses

Morningstar Farm is home to a dairy farm (Little Qualicum Cheeseworks) and a fruit winery (Mooberry Wine) in Parksville, BC. In 2001, Little Qualicum Cheeseworks was founded on a leased dairy farm and then in 2004 a 90-acre farm was purchased. The farm milks 50 mixed-breed dairy cows and produces a multitude of cheeses, which are processed in an on-farm cheese plant. The winery produces raspberry, blackberry, apple, blueberry and cranberry wines. The farm has a large farmgate store to purchase cheeses, wines and other farm products. The farm encourages the general public to visit as they offer free and guided tours of the milking parlour and cheese making plant. They have recently installed a "milk-on-tap" dispenser which allows the public to bring their own milk jugs to re-fill on the farm. Farm cheeses are sold across the province of BC. More information can be found here: https://www.morningstarfarm.ca/retailers

Agro-Forestry

Clear Sky is a retreat centre outside of Cranbrook in South Eastern BC. One of Clear Sky's many projects is Clear Sky Farm, which is an agro-forestry farm dedicated to innovative sustainable agriculture and permaculture design. The one acre demonstration food forest model includes a wide variety of nut trees, fruit trees, medicinals, berries, vines, shrubs, timber, mulch and shelter trees, all grown together in a holistic ecosystem based design. Design and installation took place over 2012 and 2013 and internships are offered each year to maintain the farm and provide educational opportunities on agroforestry. This project received support through British Columbia Agroforestry Industry Development Initiative and aims to demonstrate a sustainable, permaculture based agroforestry system for food production in a cold climate. The farm also produces value-added products such as juices, jams, and chutneys that are sold along with other farm fruits and produce at farmers' markets and used in their retreat centre kitchen. The methodology, site description and site diagrams can be found here. The Clear Sky Farm food forest project received federal and provincial funding and support through the British Columbia Agroforestry Industry Development Initiative. More information about the Clear Sky Farm can be found here: http://www.clearskyfarm.org/food-forest/

Abattoirs

Class A Abattoir

Located on Saturna Island, the Campbell Farm has been producing beef since 1945 and lamb since 1960. The farm constructed an abattoir in 1959 to meet the meat inspection regulations at the time. It has since been upgraded to meet current regulations and operates as a Class A facility. The farm mainly raises its own animals for processing, and custom cut and wrap of beef and lamb. Products are marketed primarily to local businesses on Saturna, including the café and the Saturna General Store. The annual Saturna Lamb Barbeque also provides an opportunity for Campbell Farm, and other Gulf Island lamb producers, to market a good quantity of lamb. The abattoir also provides some custom slaughter services for lamb and beef for producers on Mayne, Galiano, and Pender Islands. The abattoir is a member of the BC Association of Abattoirs and the farm is a member of the BC Sheep Federation. The abattoir is also part of the Premium BC Lamb program and is able to score lambs for quality. More information can be found here: http://bcabattoirs.org/member/campbell-farm/.

Class E Abattoir

Located in Salmo, BC, Forest Farm raises ducks, chickens, quail, geese, goats and sheep on eight acres of pasture since 2014. The farm has a licensed Class E Abattoir where they process their duck, quail and geese; the farm is also in the licensing process to produce sheep and goat cheeses. The goats are milked and the milk is also used to make natural goat milk soaps. Forest Farm raises East Friesian and Icelandic Sheep and sells grass fed lamb meat along with high quality wool for hand spinning and felting, as well as spun wool. Hand tanned sheep and goat hides are also available for sale. Free-range quail and chicken eggs are produced on the farm. Forest Farm sells their products directly from the farm, at local markets and through a 6- or 12- month CSA box. The CSA boxes are marketed as a "Protein" CSA and contain lamb, goat, duck and quail meats along with chicken, duck and quail eggs. More information can be found here: https://forrestfarmsalmo.wixsite.com/farm/home

Co-operative Distribution and Retail

Direct Farm Marketing

Merville Organics Growers' Cooperative is located in the Comox Valley and is a cooperative of five local farmers on three farms. All farms are transitioning to organic or certified organic and sell mainly through the Comox Valley farmers' market and a CSA box program. The farms that make up the cooperative include Amara Farm, Ripple Farm, and Kloverdalen Farm. Merville Organics began when Amara Farm and Ripple Farm were first starting to grow in the Valley. They were not producing enough product on their own farms to supply the local farmers' market or a full CSA box program. They decided to combine forces to share marketing efforts and increase efficiencies in other aspects of their production such as labour, tools, and input purchases. The majority of the income is derived from sales to restaurants in Tofino. In 2015, Merville Organics became a combination of a market and production cooperative and incorporated through the BC Cooperative Association. More information about Merville Organics can be found here: http://mervilleorganics.ca/.

Online Marketplace

The Cowichan Valley Cooperative Marketplace (CVCM) in partnership with Cowichan Green Community established the Cow-Op.ca. The CVCM is a non-profit cooperative made up of local farmers, business owners, and community partners. As part of the development of a food hub in the region, it was decided that an online marketplace would be a good first step to promote food sustainability, farm viability, and consumer access to local food in the Cowichan region. The Cow-Op marketplace features a variety of produce, meat, eggs, seafood, cheeses, honey and more that are grown and produced throughout Cowichan. The service is open to anyone, including retailers and wholesalers and the system accepts VISA and Mastercard for ease of use. The market opens every Friday at noon and closes Tuesday at midnight. The orders are emailed to the farmers on Wednesday morning and delivered to the pick-up location on Thursday morning. Any orders that are not picked up are donated to the local Food Bank or Soup Kitchen. More information about the Cow-op can be found at: http://www.cow-op.ca/.

Appendix B – Resources

There are many industry-based resources for best practices associated with started a farm and/or a food processing-based business. The the following is a representative list but it is not exhaustive.

BC Ministry of Agriculture. 2011 (revised 2017). A Guide to Starting and Growing A Small or Medium Sized Farm Business in British Columbia.

BC Ministry of Agriculture. 2013 – 2015. Agriculture Enterprise Budgets.

BC Ministry of Agriculture. 2014. Agroforestry and Specialty Wood Crops. Fact sheet 807.218-3

BC Ministry of Agriculture. 2017. Farm Diversification through Agri-tourism

BC Ministry of Agriculture. 2019. Meat Inspection & Licensing (website with links to several resources).

BC Ministry of Agriculture. 2019. Starting a Food or Beverage Processing Business

BC Ministry of Agriculture. 2019. Marketing Guides (website with links to several guides).

BC Ministry of Agriculture. 2019. Agriculture and Seafood Funding Programs – includes funding for business planning and marketing.

BC Food Connection. 2017. Making connections to commercial kitchens and co-packers (online resource).

BC Young Farmers. 2019. Website resource.

Select Standing Committee on Agriculture, Fish, and Food. 2018. Local Meat Production and Inspection in BC.

Kwantlen Polytechnic University. 2015. Crop and Livestock Enterprise Budgets.