# SQUAMISH AGRI-FOOD IMPACT STUDY

**Prepared by Small Business BC and the District of Squamish**
December 2021


SQUAMISH
HARDWIRED *for* ADVENTURE

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# STUDY BACKGROUND

The agri-food sector in Squamish is growing in both numbers and importance. As part of its Emerging Sector Roadmap and Action Plan, the District of Squamish (the District) identified this sector as part of its Green Economy theme, an emerging area of opportunity for strategic growth and investment.

In 2021, the District completed a comprehensive research study of this sector to better understand its impact, particularly the sector's role in generating employment and wages. This study also considers the sector's social and environmental impacts within the region. The research builds on the recently completed Squamish Valley Agricultural Plan and supplementary Background Report and Market Opportunities Analysis, with a focus on defining and characterizing the agri-food sector's role as a key contributor to local economic development.

This District study was conducted in collaboration with the market research division of Small Business BC and Lost Cairn Ventures Ltd., and in partnership with the Squamish Chamber of Commerce and Tourism Squamish and funded in part by the Province of British Columbia.

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# APPROACH AND METHODOLOGY

For the purposes of this study, the Squamish agri-food sector consists of farms, ranches, fisheries, food and beverage processors, wholesalers, retailers and food-related services (i.e. full-service restaurants, limited-service cafes, food trucks and delivery services for these outlets). Due to impacts arising from COVID-19, this report uses 2019 as a benchmark while also providing analysis on how the number of businesses within the sector has changed during the pandemic.

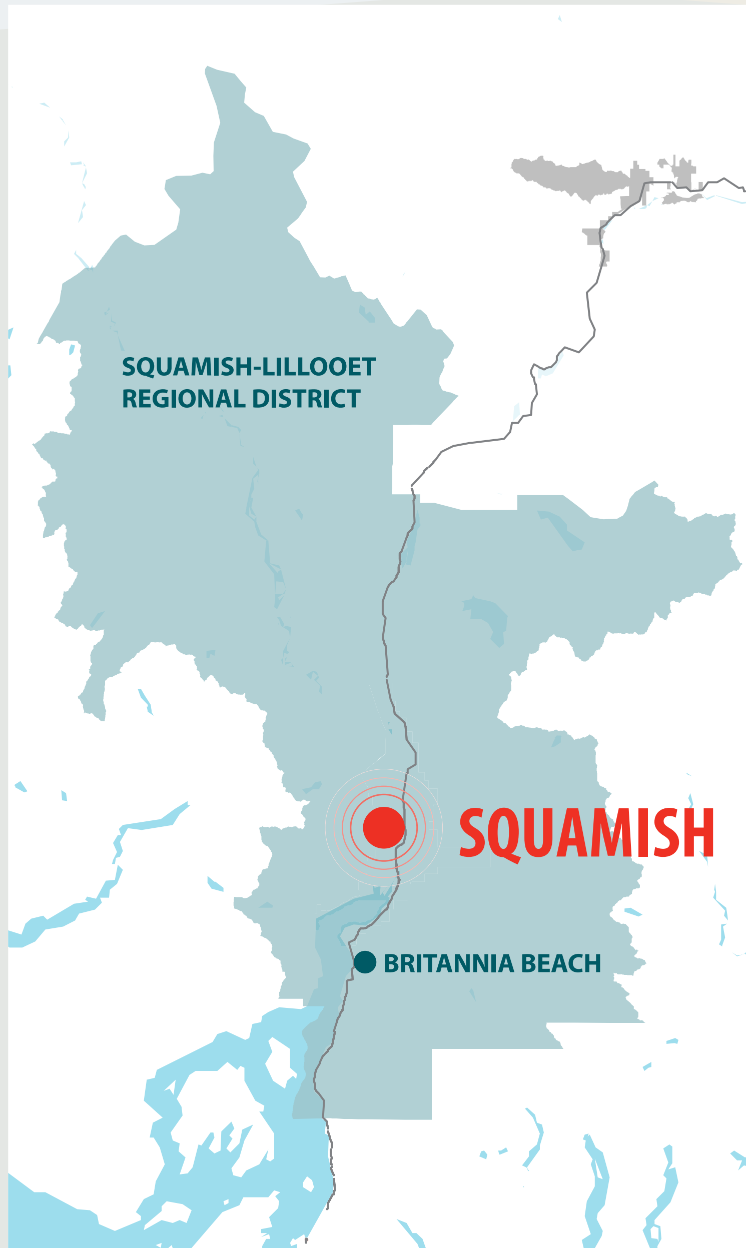
Squamish is geographically defined in this study as the area from Britannia Beach in the south to northern Squamish, including the Upper Squamish and Paradise valleys (includes the Squamish Agglomeration area and Squamish-Lillooet Area D).

An online and phone-based survey was administered over the summer and fall of 2021 to Squamish agri-food businesses. While a total of 116 businesses responded to the survey, the sample size per question ranges widely from n=13 to n=95, with qualitative questions achieving the lowest response rate. Results from the survey have been compared to local, regional and national benchmarks.

The survey asked respondents about characteristics of their business, such as age, structure, type and ownership. Owners were also asked questions about staff, revenue and expenses, sustainability efforts, business opportunities and challenges.

The following report is informed by the results of this survey as well as secondary sources, in particular EMSI Analyst (Emsi) and Statistics Canada economic data.

*Figure i Map of Squamish-Lillooet Regional District*




*Squamish is geographically defined in this study as the area from Britannia Beach in the south to northern Squamish, including the Upper Squamish and Paradise valleys.*

# STUDY OVERVIEW & KEY FINDINGS

# A VIBRANT AND GROWING AGRI-FOODS ECONOMY

**Squamish's agri-food sector is vibrant and growing. With 120 businesses in 2019 and supporting more than one thousand eight hundred local workers, this sector presents an opportunity to develop a diverse and important economic cluster that can contribute opportunities for increased local employment, equity, and diversity, improved quality of life through economic prosperity, and a strengthening of local food systems.**


Driven by a strong tourism economy and growing resident base, between 2014 and 2019 Squamish's agri-food sector experienced significant growth, with the number of businesses increasing by 21 per cent to reach 120. Despite the ongoing pandemic, this growth further accelerated between June 2019 and June 2021, rising by another 15 to reach a total of 135 businesses.

Leading this growth was the food and drinking places sub-sector with 23 new businesses established between 2014 and 2021. At 79 businesses in 2021, food and drinking places make up a significantly larger share of all businesses within the agri-food sector (59 per cent) when compared to the sector overall in BC (38 per cent). Conversely, the number of farms comprising this sector in Squamish is far below that of the BC share of 38 per cent, accounting for just nine per cent.

Squamish's emerging food and beverage manufacturing industry is demonstrated in the growing number of food processors, cideries, distilleries, and breweries, that have opened in recent years. In 2014, only two manufacturing businesses existed in Squamish. Fast-forward to 2021, and there is a flourishing food and beverage manufacturing base with a total of 14 businesses, commissary kitchens and celebrated festivals, and marketplaces. Food and beverage manufacturing represents six per cent of the agri-food sector in BC, however makes up ten percent of the agri-food sector businesses in Squamish.

Direct, indirect, and induced economic contributions of Squamish's agri-food sector totalled 2,130 jobs, $49.9 million in wages, $116.2 million in gross domestic product (GDP) and $207.3 million in sales in 2019. Adding the impact of Squamish's agri-foods onto the rest of BC, the sector supported 2,735 jobs, $79.6 million in wages, $176.1 million in gross domestic product, and sales of $329.7 million.

# SQUAMISH AGRI-FOOD SECTOR BUSINESSES

## PRE-PANDEMIC GROWTH

**120** BUSINESSES IN 2019

21% ↑ SINCE 2014

## PANDEMIC GROWTH

**135** BUSINESSES IN 2021

12.5% ↑ SINCE 2019

## COMPOSITION OF THE SECTOR

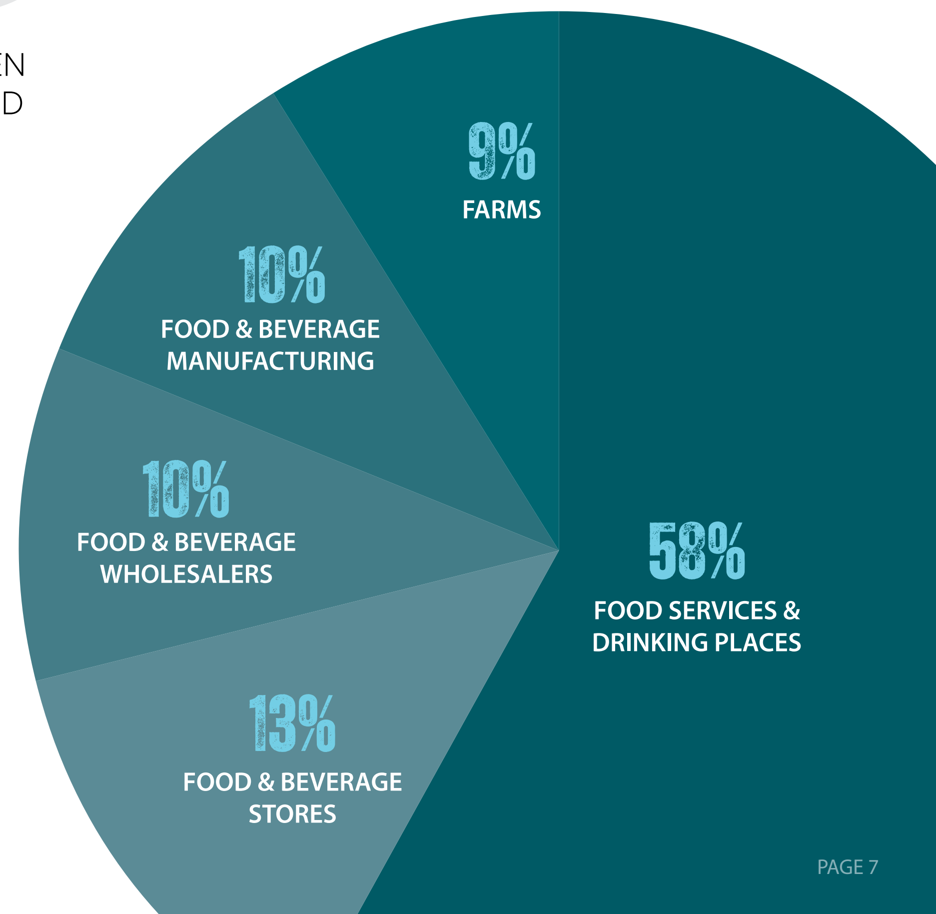
55% MINORITY OWNERSHIP

51% MICRO-SIZE 1-4 EMPLOYEES

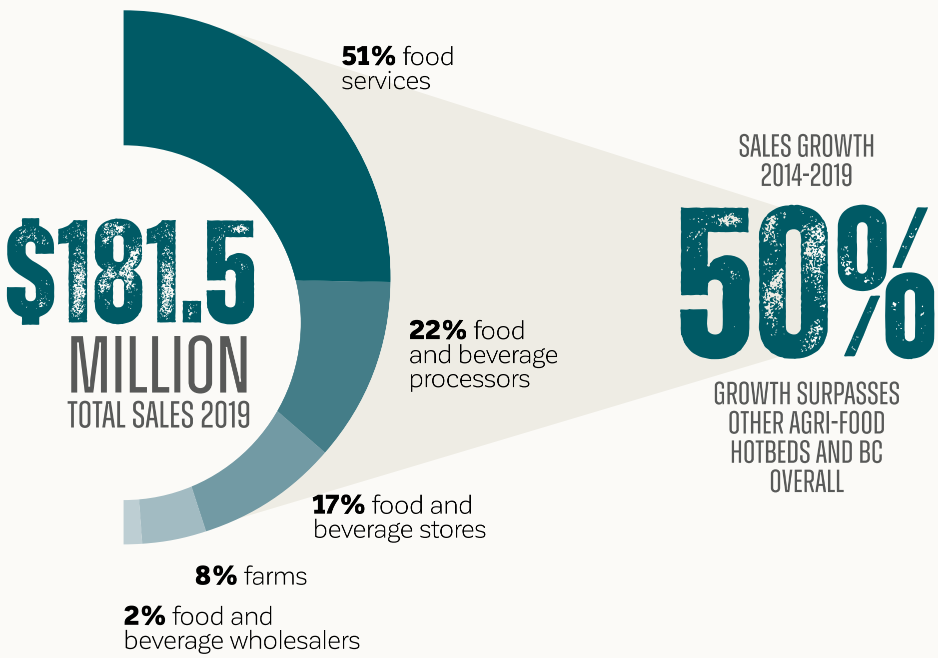
42% WOMEN OWNED

56% OPERATING 5 YEARS OR LESS

65% INCORPORATED



# ECONOMIC IMPACT OF 2019 SALES



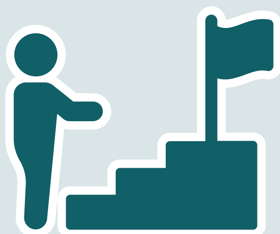

| Effect | Employment | Wages (millions) | GDP (millions) | Sales (millions) |
|---|---|---|---|---|
| Direct | 1,849 | $ 44.2 | $ 88.9 | $ 181.5 |
| Indirect | 18 | $ .483 | $ 2.2 | $ 2.4 |
| Induced | 263 | $ 5.2 | $ 25.1 | $ 23.4 |
| **Squamish Total** | **2,130** | **$ 49.9** | **$ 116.2** | **$ 207.3** |
| Rest of BC | 605 | $ 29.7 | $ 59.9 | $122.4 |
| **BC Total** | **2,735** | **$ 79.6** | **$ 176.1** | **$ 329.7** |

There is no doubt that this sector plays a significant role in the local economy, contributing to 21 per cent of total employment and supporting other sector supply-chains. In 2019, purchases by the agri-food sector amounted to $79.2 million, with 21 per cent of these purchases made in-region. This points to an opportunity to further increase the economic contribution of this industry via increased local sourcing.

Notable, was this sector's strong sales growth. Between 2014 and 2019 alone, Squamish agri-food sales grew by 50 per cent – or by more than $60 million. The largest contributor to this growth came from the food services sector, which experienced an increase of 48 per cent or $30.2 million in sales between 2014 and 2019. Food and beverage processors and farms followed in terms of growth, with an 82 per cent increase or $17.8 million in sales while food stores grew by 25 per cent or $6 million over this same period1. This represents a high rate of growth when compared to other communities across the province, exceeding the sales growth from known agricultural hotspots in the Fraser Valley such as Abbotsford/ Mission and Chilliwack, and for all of BC[2].

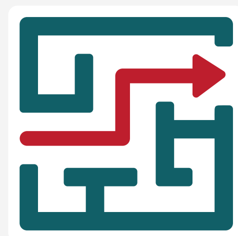
# TRENDS, CHALLENGES AND OPPORTUNITIES

In the 2021 Agri-food Survey, agri-food businesses owners highlighted workforce attraction and retention, revenue and sales growth, and cost management as the top three challenges facing this sector. Respondents stated that COVID-19, the high cost of living, and a shortage in labour supply were the primary drivers for these challenges. While significant challenges exist, respondents also identified several opportunities related to shifting consumer purchase demands towards more ethical and local consumption.



## TOP SECTOR CHALLENGES

1. LABOUR ATTRACTION AND RETENTION
2. REVENUE AND SALES
3. COST MANAGEMENT



## TOP REASONS FOR CHALLENGES

COVID-19
**83%**

COST OF LIVING
**72%**

LABOUR SUPPLY SHORTAGE
**57%**

## TOP OPPORTUNITIES FOR GROWTH

SHIFTING CONSUMER PREFERENCES TOWARDS PLANT-BASED DIETS AND WELLNESS

DEGLOBALIZATION OF SUPPLY CHAINS

ETHICAL PURCHASE BEHAVIOURS

1 Ibid
2 Source: EMSI 2021.3 2014, 2019 Squamish Regional Jobs Wages Sales

Developed by Oxford University economist Kate Raworth, the Doughnut consists of two concentric rings: a social foundation, to ensure that no one is left falling short on life's essentials, and an ecological ceiling, to ensure that humanity does not collectively overshoot the planetary boundaries that protect Earth's life-supporting systems.

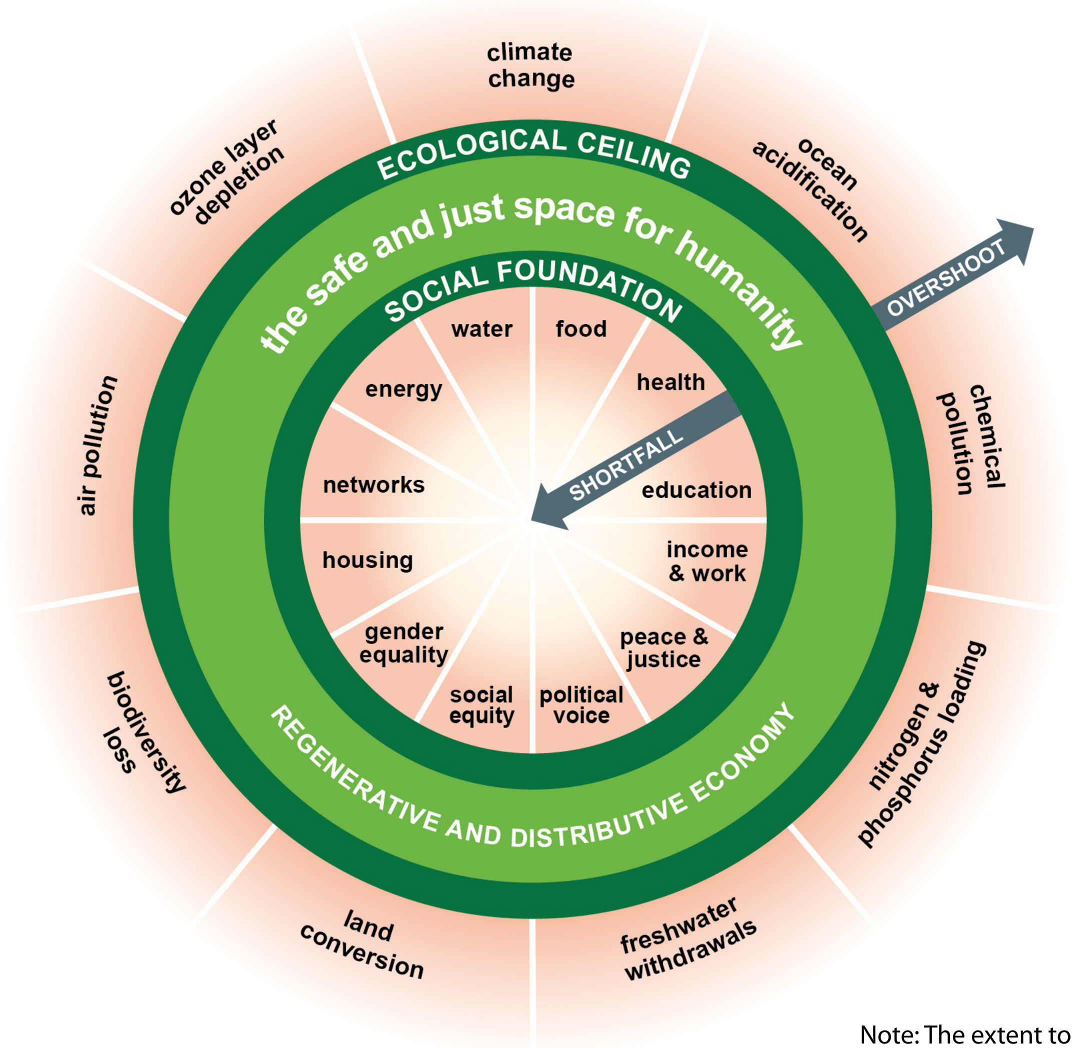



*Figure ii Doughnut Economics explained*

Note: The extent to which boundaries are transgressed and social foundations are met are not visible on this diagram.
Source: www.kateraworth.com

# CONSIDERATIONS FOR AGRI-FOOD SECTOR DEVELOPMENT

In early 2021, the District of Squamish adopted the Doughnut Economic Framework to help develop forward actions and measure the progress of its Emerging Sector Roadmap and Action Plan. The framework, developed by Oxford University economist Kate Raworth, moves from an economy premised only on monetary growth to one that ensures a social foundation (e.g. all citizens have access to life's essentials) while respecting the earth's ecological ceiling. This report begins to explore this sector in relation to thematic areas of the Doughnut and its principles to help direct future economic development efforts.

Several emerging trends will impact on the agri-food sector in Squamish, and when considered through a lens of doughnut economics, begin to demonstrate opportunities to improve social and environmental impacts resulting from this sector. These trends, which include a move to plant-based diets, a deglobalization of food supply chains and shifting consumer preferences towards environmentally sustainable food sources will have a generally positive impact locally, however, will also present considerable impacts to the established global food supply chain in relation to income, employment, and equity.

Taking doughnut economics into consideration, the findings from this research consider and further elaborate on the following thematic areas when developing a thriving agri-food sector in Squamish:

1) Scaling businesses, cluster, and supply-chain development

2) Stewarding employment lands, land systems change, and local food systems

3) Talent attraction, retention and training

4) Adopting sustainability measures and climate change adaption and mitigation strategies

# SCALING BUSINESSES, CLUSTER, AND SUPPLY-CHAIN DEVELOPMENT

1

The characteristics of businesses making up Squamish's agri-food sector suggest that the sectors' relatively young profile would benefit from business and mentorship programs aimed at scaling operations from their micro size to small-and-medium-sized enterprises. Great examples are the University of British Columbia's Feeding Growth Program which is aimed to support and scale progressive BC-based food brands and entrepreneurs, the Province's Agri-Business Planning Program which supports producers and food processors through three business planning streams or the Province's Beneficial Management Practices Program which supports producers through the creation of an Environmental Farm Plan.

2

Ensuring that adequate infrastructure is in place for these businesses to scale will be crucial. A 2021 supply-chain analysis conducted by the District for the agri-food sector in Squamish, identified enabling sectors such as printing, refrigerated warehousing and storage, food production and manufacturing (as inputs to other manufacturing processes), as opportunities for development. Facilitating research and development capacity, prototyping space, increased commissary kitchen space, storage, including refrigeration, and distribution capacity, will be needed to nurture the development of the 56 per cent of businesses that are five years or less in operation.

## POTENTIAL ACTIONS

- Establish local small business and mentorship programs for agri-food sector businesses aimed at increasing food production, and scaling food and beverage manufacturing businesses.
- Focus business development efforts on agri-food supply-chain development to establish needed infrastructure for agri-food businesses (i.e. refrigeration, storage, distribution).
- Complete a feasibility assessment to enhance local processing capacity via the establishment of a local Food Hub.


# CASE STUDY
# BC FOOD HUBS

The BC Food Hub Network was developed by the Ministry of Agriculture to foster growth and innovation in food processing across the province by improving industry access to facilities and amenities, equipment, technology, services, and through business support. The network creates opportunities for collaboration amongst regional food producers and establishes regional food hubs. Food hubs refer to shared-use food and beverage processing facilities that offer food and agriculture businesses access to commercial processing space, equipment, expertise and resources to support business development and growth.
The hubs vary in size and scale and are currently operated in >10 communities across the province managed by local institutions, municipalities, and other organizations.

# STEWARDING EMPLOYMENTS LANDS, LAND SYSTEMS CHANGE, AND LOCAL FOOD SYSTEMS

1

The growing prevalence of the food and beverage service industry, agri-food manufacturers and food and beverage stores in Squamish presents new employment opportunities and economic growth. The sector's development and resulting composition will be important to monitor in relation to our finite employment lands and land systems change. The resulting outcome of current efforts by the District to project future demand for different forms of employment space, as well as to establish guiding principles for employment space development, should be considered with the evolving nature of this sector and in relation to other sectors comprised in Squamish's economy.

2

With farms making up only nine per cent of Squamish's agri-food sector, the preservation and use of the Agricultural Land Reserve (ALR) for soil-based agriculture will be vital in promoting local food systems and increasing the use of local suppliers. Only about 50 per cent of BC's ALR land is used for agriculture which indicates an opportunity for increased food production capacity. In Squamish Valley, only 2 per cent (47 hectares) of the ALR and an additional 21 hectares outside the ALR are currently being farmed which translates into a total of 68 hectares of farming on 22 parcels of land. In addition, 551 hectares (34 per cent of which is privately owned ALR) have potential for agriculture, with both small and large (> 16 hectare) parcels available. Ensuring District land use policy for ALR lands is kept consistent with provincial regulations and restricting the use of ALR for non-agricultural purposes, including residential-estate development is therefore important in preserving land for food production.

3

While food and drinking places, food stores, and manufacturing, saw an uptick in the number of businesses within Squamish between June 2019 and June 2021, the number of farms in Squamish and area D dropped by 3 to a total 12 businesses.

This decrease translates to a 25 per cent drop in farms while BC saw an overall decrease of 4.1 per cent during this same timeframe. This drop and relatively low number of local farm operations, signals the need for ongoing efforts to increase local food systems and encourage local supply chains to serve the agri-food and other sectors within Squamish's economy. The Squamish Valley Agricultural Plan, with implementation led by the Squamish Food Policy Council and supported by the District of Squamish and SLRD, is a guiding document along with the District's Emerging Sector Roadmap and Action Plan which highlights cluster development actions for the agri-food sector.

# POTENTIAL ACTIONS

- Consider agri-food cluster development requirements as part of employment space research and policy.
- Preserve Squamish and Area D Agricultural Land Reserve (ALR) lands for soil-based agriculture.
- Continued implementation of Squamish Valley Agricultural Plan and District's Emerging Sector Roadmap and Action Plan to facilitate local food systems.
- Support regional working groups that work to enhance food resiliency in the Sea to Sky.
- Implementation of the Good Food Procurement Program to encourage new and expanded agri-food businesses and local supply-chain development.

## CASE STUDY
## GOOD FOOD PROCUREMENT PROGRAM

Led by the Squamish Food Policy Council (SFPC), the Good Food Procurement Program began with the endorsement of the Good Food Pledge and intention to develop and adopt "good food" policy by local and regional governments in the Squamish-Lillooet region. The proposed pledge and policy aims to support local food producers and processors by establishing food procurement practices aligned with "good food" values. The pledge and policy are meant to help increase the percentage of local and sustainable food purchased by local institutions and businesses, in turn, increasing the support and demand for local agriculture and products. With the Squamish Food Policy Council and other partners, the District will continue to socialize and advance this work within the region. Find out more by visiting squamishfoodpolicycouncil.com.

# 2019 EMPLOYMENT SNAPSHOT

**1,849 WORKERS ARE EMPLOYED**

accounting for 22% of Squamish's total workforce.

**63% OF WORKERS** ARE EMPLOYED IN FOOD SERVICES

while those working F&B stores account for the second largest share at **26%**

**EMPLOYMENT** GROWTH 2014-2019 **29%**

compared to **13%** across BC

**55% OF WORKERS** ARE FULL-TIME WORKERS

compared to **78%** across BC

15
39

**72% OF SQUAMISH'S** AGRI-FOOD WORKERS are between the ages of **15-39**

**49% OF WORKERS** IN AGRI-FOOD have post-secondary accreditation

**32%** have a post-secondary diploma or certificate, **17%** a degree or higher

**WORD OF MOUTH**

is the top hiring technique among agri-food businesses

# TALENT ATTRACTION, RETENTION AND TRAINING

Talent attraction and development will play a crucial role in meeting future employment demand for this growing sector. The agri-food sector significantly contributed to the overall volume of job postings in Squamish in 2019 and continues to be one of the top recruiting sectors within Squamish. BC's Labour Market Outlook 2021 estimates that over the next ten years, there will be more than one million job openings, with many of these openings to be located in the Mainland/ Southwest region of BC, where Squamish is located. The report suggests that 60 per cent of these job openings will replace existing workers while the remaining 40 per cent will come from economic growth. Moreover, the report forecasts that several occupations in the agri-food sector will be amongst the highest in demand.

The research undertaken to characterize the Squamish agri-food sector and its employment, identified a mismatch of skills with the profile of available employment in this sector. Squamish's agri-food workers are highly educated (often in fields unrelated to their employment) suggesting a social inequity exists in terms of available employment across Squamish. This inequity suggests that the skills and competencies of these employees may be underutilized but also, that potential workers who more closely match the skills and qualifications required may be passed over.

Ongoing labour challenges faced by the agri-food sector in Squamish should be mitigated through the facilitation of re-skilling and up-skilling of underemployed, better aligning workforce expectations with workplace opportunities, and facilitating new workforce entrants to Squamish via recruitment and retention tactics. To ensure that these tactics are successful, Squamish, with other levels of government, will need to continue to address its high cost of living via access to affordable housing, childcare, and transit.

To ensure talent access for agri-food businesses ongoing, Squamish will need to work to better align the skills and competencies of its workforce with the development of its economy. This will require an in-depth evaluation of future workforce needs in this sector and other sectors of the local economy to determine future skill requirements and to assess the future of work more broadly in relation to emerging trends like automation and the remote workforce.

2

Today, the average age of farmers is 55 years old, and farmers represent just 2 per cent of Canada's population[3]. Very few farmers (8.4 per cent) have a succession plan in place for their retirement[4].

Work by the Squamish Food Policy Council, to introduce Young Agrarians programming to the Squamish-Lillooet Regional District and Howe Sound's soon-to-be farm program through land matching programs and workshops, are steps in encouraging youth to explore a career in agriculture - whether regenerative farming, agritech or value-added production.

3

The agri-foods sector in Squamish offers the opportunity for increased social equity and diversity. At 42 per cent, Squamish over-indexes in female-owned businesses compared to the provincial average of 38 per cent. Of the 90 businesses disclosing their ownership composition, 55 per cent reported that they identified with a minority group. While a benchmark does not exist for Squamish overall, this indicator will be one to monitor overtime. To encourage increased diversity in this sector, a strengthened focus on working with organizations such as WorkBC, WeBC, and the Immigrant Services Society of BC to create and promote opportunities for entrepreneurship and employment among diverse populations will be key.

## POTENTIAL ACTIONS

- Complete an in-depth evaluation of labour force needs to determine future skill requirements for agri-food sector.
- Support to enhance local agri-food programming such as Young Agrarians, land-linking programs, and youth programming via Howe Sound Secondary while exploring additional opportunities to broaden educational offerings to diverse populations.
- Support succession planning opportunities among agri-food sector businesses.
- Partner with organizations and other levels of government to facilitate increased entrepreneurship and workforce access among diverse populations.

3 Statistics Canada 2017a; Statistics Canada, 2011
4 Census of Agriculture, Statistics Canada 2017a

# CASE STUDY
# BC LAND MATCHING PROGRAM

The B.C. Land Matching Program (BCLMP) provides personalized land matching and business support services to farmers looking for land to start or expand their farm, and landholders interested in finding someone to farm their land. The advantage of working with a Land Matcher is free hands-on support to understand regulations, evaluate opportunities, access resources, and ultimately find a land match.

The program is delivered by Young Agrarians (YA) and addresses the high cost of land as a significant barrier for those seeking to enter the B.C. agriculture industry. There is no cost to participate, and our services are available to farmers and landholders of all ages across B.C. https://youngagrarians.org

**93%** OF SQUAMISH BUSINESSES PRACTICE SUSTAINABILITY MEASURES

**75%** WASTE REDUCTION

**73%** LOCAL SOURCING

**44%** SOURCE ORGANIC, FAIR TRADE, NON-GMO PRODUCTS

**73%**

OF BUSINESSES SOURCE PRODUCT LOCALLY WITH...

**58%** citing that less than **20%** of their supply chain purchases are local but...

**52%** source over **80%** of their purchases from BC sources.

OF THE TOTAL

**$79.2M**

IN PURCHASES MADE BY THE AGRI-FOOD SECTOR IN 2019,

**79%** OF $61.5M WAS SPENT ON OUT-OF-REGION PURCHASES

**66%**

OF AGRI-FOOD BUSINESSES DONATE PRODUCTS OR SERVICES TO THE SQUAMISH COMMUNITY,

with **55%** directing a portion of their revenue to charities in Squamish and **53%** sponsoring local community events

# ADOPTING SUSTAINABILITY MEASURES AND CLIMATE CHANGE ADAPTION AND MITIGATION STRATEGIES

With 93 per cent of Squamish agri-food survey respondents indicating they have adopted sustainable practices as part of their business, it is clear that this sector recognizes the importance of mitigating environmentally harmful practices and processes. With waste reduction as the most prevalent measure among respondents, and only 13 per cent indicating they make their own certified organic, fair trade or non-GMO products, there is a clear opportunity to shore up the use of sustainable practices whether in food production or the sourcing of ingredients for manufacturing.

Increasing regenerative practices in Squamish's agri-food sector can take on many forms. Regenerative farming practices are helping to restore ecosystem health and are building and maintaining soil productivity and fertility[5]. In farming, encouraging the adoption of technology and innovation through academic research, and development partnerships and via education and training for farmers are two approaches that could enhance the use of regenerative practices and help lower emissions.

For value-added food and beverage manufacturing, a focus on using waste as an input, adopting technology to increase efficiency and lower emissions, and promoting the use of local products will further enhance the efforts toward lowering emissions.

According to the 2021 Sea to Sky Food Recovery Strategy and Action Plan[5], edible food waste from grocers, restaurants and hotels is provided to food banks and programs, yet a significant amount is still sent to composters, farms or the landfill each year. Estimates suggest that there is between 6,000 and 9,400 tonnes of edible food waste generated in the Sea to Sky Corridor each year with between 165 tonnes and 530 tonnes being recovered for redistribution, suggesting that there is a significant opportunity to recover edible food. Specific opportunities identified for Squamish include recovery from retail/grocery with potential yields of between 1,540 and 2400 tonnes and hotels, restaurants and institutions with a range of between 1,680 and 2,620 per annum.

In considering the ecological ceiling of Doughnut Economics principles which is required to create a thriving environment, the agricultural community must be included in climate change adaptation and mitigation planning, and emergency preparedness. Thereby the sector will have key inputs into the creation of a more resilient and assured food system. With estimations that the SLRD will see a climatic shift including higher average temperatures, more precipitation, and a decrease in snowfall, climate change is expected to cause increased flooding in the spring, drought conditions and an increased wildfire risk in the summer. These increasingly extreme climate events are likely to pose threats to agricultural land, farm viability, and local food supply chains. It will be essential for the Squamish agri-foods sector to participate in efforts to mitigate and adapt to the effects of climate change through emergency management and preparedness, and the adoption of regenerative agricultural methods.

The District of Squamish's Circular Economy (CE) Roadmap identifies food systems as a priority area of focus. The Roadmap supports the development of economic prosperity in the region while delivering additional environmental and social benefits to the community through the adoption of CE principles. Circular Economy practices in the agri-food sector focus on reduced resource consumption, intensified product use, extending life or products or components, and giving resources new life. The roadmap assists the community to identify and facilitate initiatives to create circularity, from both a commercial and residential perspective. In addition, the Roadmap identifies the need to set the foundations for circularity through collaboration, innovation, policy and investment, to ensure that circular practices are initiated, and sustainable long term.

5 Response to Findings & Recommendations of the B.C. Food Security Task Force. https://ostara.com/project/ellen-macarthur-foundation-case-study-ostara-nutrient-recovery-technologies-closing-nutrient-loop/

# POTENTIAL ACTIONS

- Identify and facilitate academic research and development opportunities to deploy in Squamish to enhance regenerative farm production practices.
- Implement Squamish's Circular Economy Roadmap and undertake in-depth research on food circularity.
- Encourage and facilitate local procurement practices via new tools such as Squamish's Asset Sharing Tool.
- Support the implementation of regional initiatives such as the strategies and actions recommended in the Sea to Sky Food Recovery Strategy and Action Plan (2021).
- Include agriculture sector in local government and regional district climate change plans and strategies, and consider the connection between emergency preparedness and reliability of food supply.

# CASE STUDY INNOVATION

An example of using innovation to advance circular practices, and reduce resource consumption, is Ostara Nutrient Recovery Technologies: converting wastewater nutrients into fertilizer. This Vancouver based company uses a nutrient recovery strategy that can be easily integrated into bio-based wastewater plant. This process captures up to 85 per cent of the phosphorus and up to 15 per cent of the nitrogen in wastewater. These nutrients are then transformed into pure fertilizer granules and used to make Crystal Green. This product, when used in lieu of an equivalent standard fertilizer can eliminate up to 10 tons of $CO_2$ emissions per one ton of fertilizer used.

Source: https://ostara.com/projects

# DETAILED STUDY FINDINGS

# COMPOSITION OF THE SQUAMISH AGRI-FOOD SECTOR

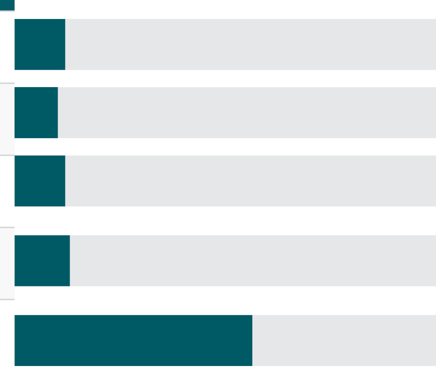
**Propelled by a vibrant tourism economy and continued population growth, the agri-food sector experienced strong growth between 2014 and 2019.**

This study used the Statistics Canada Business Register and North American Industry Classification (NAICS) to report on the composition and growth of businesses within this sector in Squamish. To be included in the Business Register, a business must have a minimum of $30,000 in annual revenues, file a corporate tax return or have employees registered with a Canada Revenue Agency payroll deduction account.

In 2019, 120 businesses in the Squamish agri-food sector met these criteria. Of these, the food services and drinking places sub-sector accounted for 54 per cent of the total, with the remaining sub-sectors each accounting for between 10 per cent and 13 per cent of the total.

*Figure iv Squamish agri-food businesses, percentage by sub-sector*

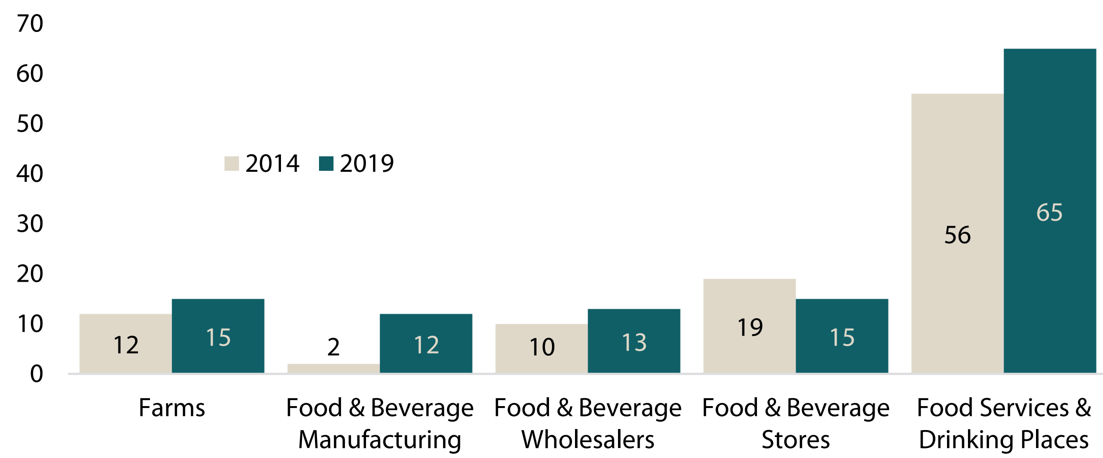
| 2019 Squamish business counts | Business count | Squamish Share | BC Share |
|---|---|---|---|
| Farms | 15 | 12% | 38% |
| Food and beverage manufacturing | 12 | 10% | 6% |
| Food and beverage wholesalers | 13 | 11% | 7% |
| Food and beverage stores | 15 | 13% | 12% |
| Food services and drinking places | 65 | 54% | 37% |
| **Total** | **120** | **100%** | **100%** |



Source: Emsi 2021.3, Statistics Canada Business Register, June 2019

Between 2014 and 2019, the agri-food sector in Squamish added 21 businesses, growing 21 per cent. This was driven by an increasing population (2,171 or 10 per cent from 2014-2019) and a strong tourism sector, which saw 615,000 visits to Squamish in 2018 alone.

*Figure v Squamish agri-food industry, change in business counts*




Source: Emsi 2021.3, Statistics Canada Business Register, June 2014, 2019

While food service and drinking places grew the most (9 businesses or 16 per cent), most sub-sectors added businesses during this period. Food and beverage retail stores during this period contracted by four businesses consistent with a general decline in retail store businesses resulting from increased competition by ecommerce food-service companies.

*Table 2 Squamish agri-food industry, change in business counts (2014-2019)*

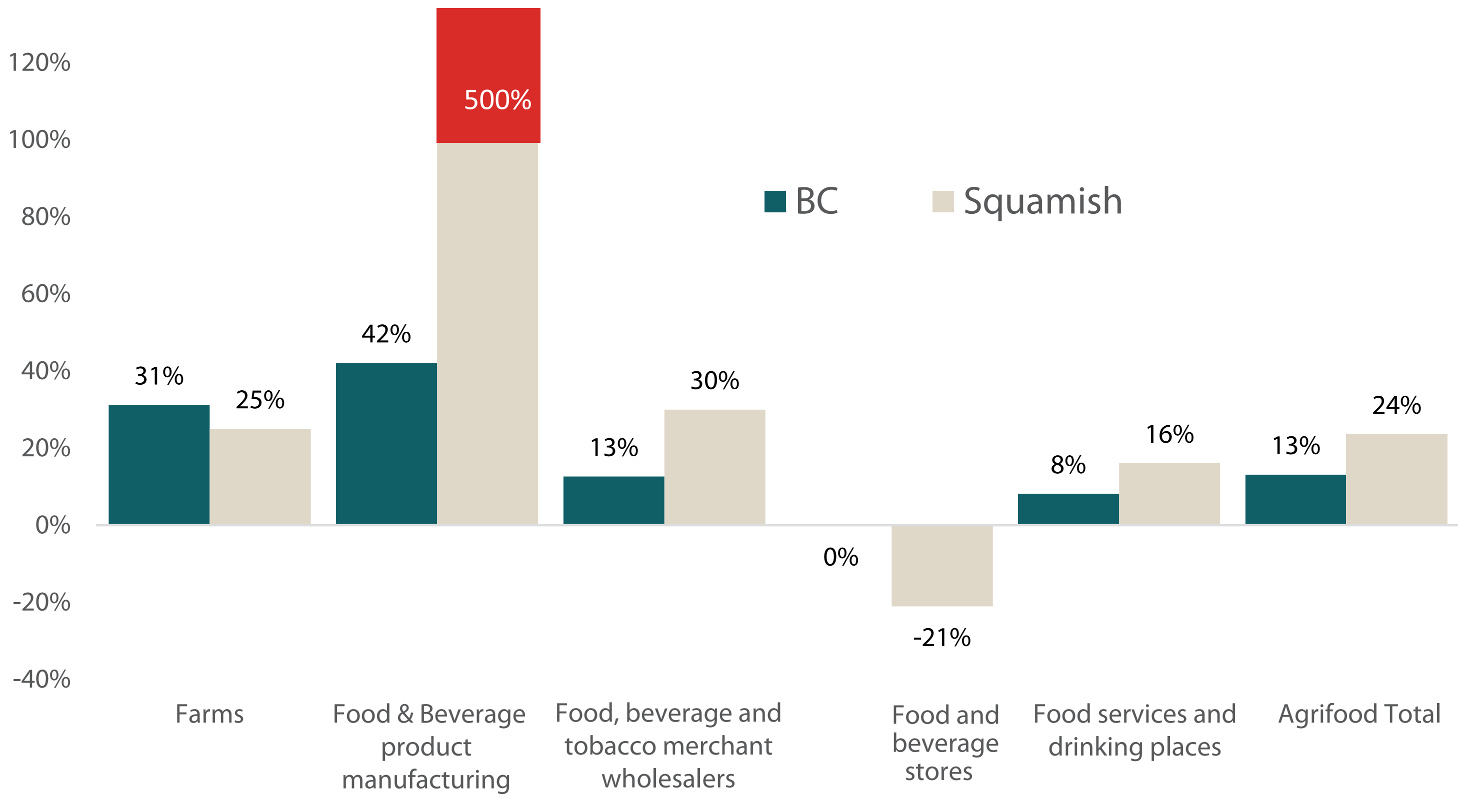
| 2014-2019 business change [8] | Count |
|---|---|
| Farms | 3 |
| Food and beverage manufacturing | 10 |
| Food, beverage and tobacco merchant wholesalers | 3 |
| Food and beverage stores | -4 |
| Food services and drinking places | 9 |
| **Total** | **21** |

Source: Emsi 2021.3, Statistics Canada Business Register, June 2014, 2019

**Squamish business growth in this sector outpaced the provincial growth rate.**

Squamish's agri-food sector grew 21 per cent between 2014 and 2019 outpacing the province's growth rate of 13 per cent by 8 points. While relatively small in comparison, food and beverage manufacturers, which include chocolate producers, fish processors, breweries and distillers, grew from 2 to 12 companies or 500 per cent over this time period.

*Figure vi Squamish agri-food growth rates, 2014-2019*




Source: Emsi 2021.3, Statistics Canada Business Register, June 2014, 2019

**The Squamish agri-food sector grew between June 2019 and June 2021 despite the onset of the COVID-19 pandemic.**

When comparing counts of the sector's businesses in June 2021 to a pre-pandemic June 2019 for the Squamish area, it demonstrates an accelerated growth trajectory with Squamish adding 15 businesses during this timeframe.

| 15 | -3 | +2 | +14 | - | +2 |
|---|---|---|---|---|---|
| NEW BUSINESSES | FARMS | FOOD & BEVERAGE MANUFACTURING | FOOD SERVICES & DRINKING PLACES | FOOD & BEVERAGE WHOLESALERS | FOOD & BEVERAGE STORES |

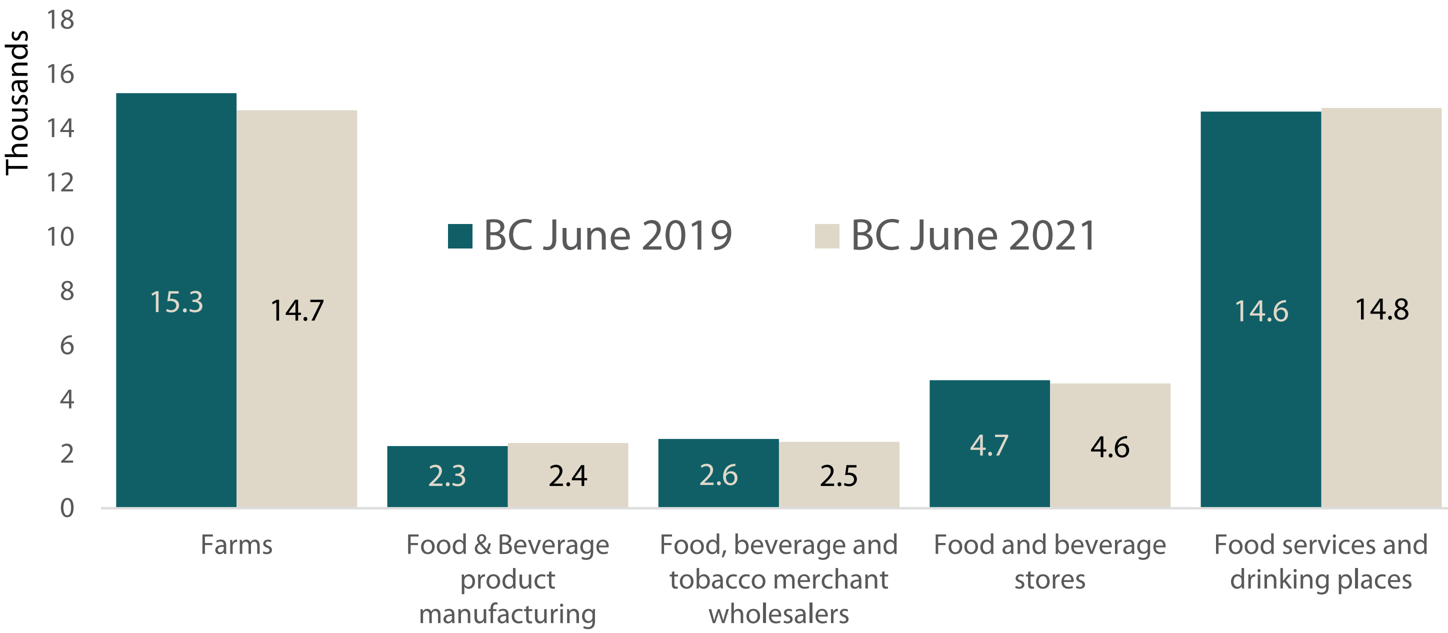
*Table 3 Squamish sub-sector business counts*

| 2021 Squamish business counts | Business count | Squamish Share | BC Share |
|---|---|---|---|
| Farms | 12 | 9% | 38% |
| Food and beverage manufacturing | 14 | 10% | 6% |
| Food and beverage wholesalers | 13 | 10% | 6% |
| Food and beverage stores | 17 | 13% | 12% |
| Food services and drinking places | 79 | 58% | 38% |
| **Total** | **135** | **100%** | **100%** |

Source: Statistics Canada Business Register, June 2021

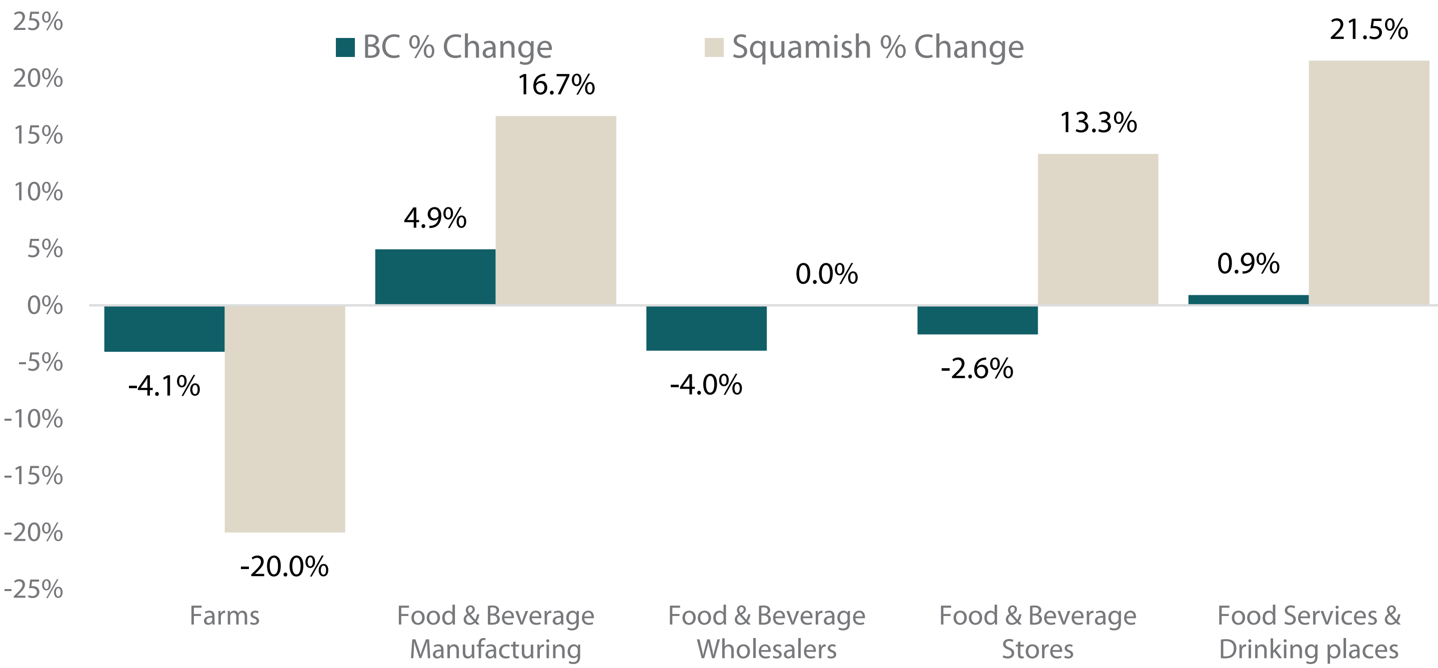
British Columbia, on the other hand, reported a net loss of -1.5 per cent or 604 sector businesses during the 2019-2021 period. This included losses of 133 eating and drinking establishments (0.9 per cent) and 627 farms (-4.1 per cent), countered by an increase of 113 (4.9 per cent) food and beverage processors.

*Figure vii Covid impact on BC agri-food establishments*




Source: Statistics Canada Business Register, June 2019, 2021

*Figure viii Percentage change in agri-food business counts during COVID-19, June 2019 - 2021*




Source: Statistics Canada Business Register, June 2019, 2021

# BUSINESS CHARACTERISTICS

The following section explores the composition and characteristics of businesses making up Squamish's agri-food sector. Please note that data relevant to this section is based on a combination of Statistics Canada data and a survey of agri-food businesses administered locally in the second and third quarter of 2021.

## Age of businesses

**Squamish's agri-food sector consists of a younger population of businesses relative to BC.**

While the majority of businesses (56 per cent) in the Squamish agri-food sector have been operating less than five years, only 23 per cent fall into the same category in British Columbia. Further, 19 per cent or 23 of these businesses are in their first year of operation. The food services sub-sector reported the largest number of new businesses: 14 food and drinking establishments.

*Table 4 Squamish agri-food businesses, count by age of business*

| Business age | Count estimate | Percent |
|---|---|---|
| First year | 23 | 19% |
| 2-5 years | 45 | 38% |
| 6-10 years | 23 | 19% |
| 11-15 years | 13 | 10% |
| 16-25 years | 9 | 8% |
| 26+ years | 7 | 6% |

Source: Squamish Agri-food Survey, 2021, n=67

A key advantage associated with having such a high percentage of new businesses is the adoption of the latest technologies and best practices. A possible disadvantage, however, is a lack of experience in dealing with unexpected disruptions and threats to business. Mentorship plays an important role in having these early-stage businesses succeed, and is available through several regional, provincial and federal organizations. These include:

- UBC Centre for Sustainable Food Systems' Feeding Growth
- Young Agrarians apprenticeship program
- WeBC mentorship
- Futurpreneur Canada financing and mentorship programs

Of equal importance is the ability to tap into a network of local businesses through organizations such as the Squamish Chamber of Commerce or Tourism Squamish, which can help by sharing the local operating context and by connecting new businesses to valuable resources.

# Business structure

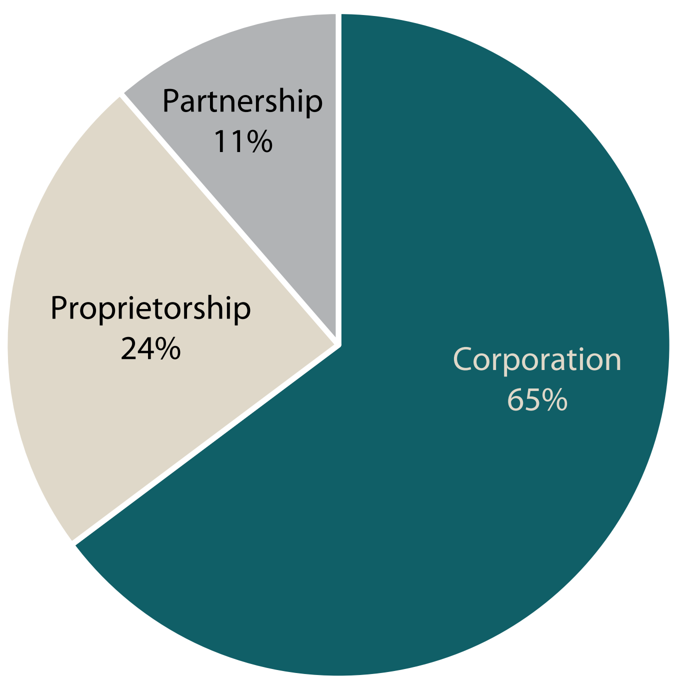
**Corporations represent 65 per cent of agri-food businesses in Squamish**

Companies can choose between several business structures in British Columbia, including corporations, partnerships, and proprietorships. The corporation is the most complex and expensive to maintain but mitigates the liability owners face when operating their businesses. Additionally, analysis by Statistics Canada suggests that while sole-proprietorship has a higher entry rate it has also has higher exit rates than business ownership (incorporation) with lower survival probability[6].

In Squamish, 65 per cent of businesses in this sector have chosen to be structured as corporations, far higher than the provincial average of 44 per cent (source: Statistics Canada). Proprietorships and partnerships combine for 35 per cent of the total, far lower than the provincial share of 56 per cent adopting these structures. The relatively high number of incorporated agri-food companies in Squamish suggests, that while many of the businesses are relatively young, their adoption of a more formal structure lends itself to a higher rate of success. Incorporating also demonstrates an added level of commitment to the business, as it requires separate tax returns and annual reports to be submitted to the provincial corporate registry.

Food services dominates the sector for corporations, with 46 companies (38 per cent) incorporated.

*Figure ix Squamish agri-food businesses by business structure*




Source: Squamish Agri-food Survey, 2021, n=95

6 The Entry into and Exit out of Self-employment and Business Ownership in Canada
By Douwere Grekou and Huju Liu, Economic Analysis Division, Statistics Canada

# Ownership profile

**At 42 per cent, Squamish over-indexes in female-owned agri-food businesses relative to the provincial average of 38 per cent.**

As an indicator of diversity, business owners were asked to optionally disclose whether they identify as female, members of a minority group, black or indigenous people of colour (BIPOC), lesbian, gay, bisexual, transexual or queer (LGBTQ+), or another minority group.

Of the 90 businesses responding to this question, 55 per cent reported that they identified with one or more of these groups – an estimated 66 businesses in the Squamish area. The 42 per cent share of female business owners in this sector in Squamish (extrapolated to 50 businesses) is higher than the 38 per cent female business owners overall in the area, and higher than the 38 per cent provincial average in the agri-food sector.

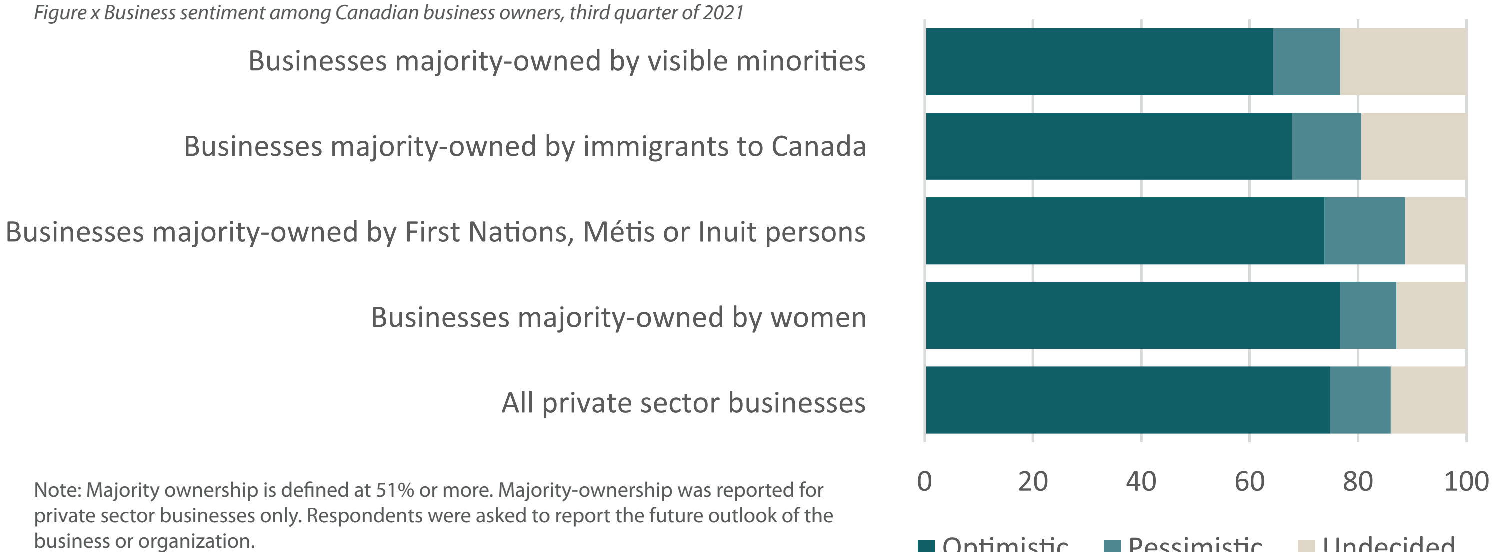
*Table 5 Squamish agri-food businesses, minority ownership*

| Minority ownership[13] | Businesses | Percent |
|---|---|---|
| No | 53 | 44% |
| Other | 11 | 9% |
| BIPOC-owned | 4 | 3% |
| LGBTQS+-owned | 1 | 1% |
| Women-owned | 51 | 42% |

Source: Squamish Agri-food Survey, 2021, n=90

While research indicates that COVID-19 has had a proportionally higher effect on minority populations, including women, in terms of their participation in the workforce and overall employment profile, the most recent Canadian Survey on Business Conditions by Statistics Canada reveals that business intentions among women-majority-owned businesses have a more optimistic outlook, with 75.3 per cent of business owners reported having an optimistic future outlook over the next 12 months, when compared to private businesses overall (71.8 per cent) and other sub-populations and visible minority groups. According to research, majority-owned women businesses are also more prevalent in service industries, such as retail trade, accommodation and food services, and tourism[7] .

*Figure x Business sentiment among Canadian business owners, third quarter of 2021*




Note: Majority ownership is defined at 51% or more. Majority-ownership was reported for private sector businesses only. Respondents were asked to report the future outlook of the business or organization.
Source: Canadian Survey on Business Conditions, third quarter of 2021 (Table 33-10-0393-01)

7 Analysis on businesses majority-owned by various sub-population groups and visible minorities, fourth quarter of 2021 by Stephanie Tam, Shivani Sood and Chris Johnston, Statistics Canada

# Size of business

**Micro businesses with between one and four workers make up half of all businesses with a reported firm size.**

The distribution of firm size by the number of employees in each business can be an important determinant of sector competition and strength. If a sector is dominated by businesses with few employees, then this is considered a competitive industry. Small business owners are considered "price takers" meaning that they must accept the prevailing market price and command a small share of the market. If the sector is dominated by businesses that have many employees (large businesses), this sector is considered less competitive. Less competitive industries are made up of business who have a large share of the market and are known as "price makers" meaning they can influence the market price and enjoy pricing power.

Through its Business Register, Statistics Canada collects data from business tax returns and payroll deduction information to track the number of businesses by the number of employees. In British Columbia, businesses that have fewer than five employees are micro businesses, while those with fewer than 50 employees are small businesses.

In BC, the agri-foods sector is dominated by micro and small businesses. Only 4.8 per cent of businesses making up this sector employ 50+ workers. Of sub-sectors making up the agri-foods, food and beverage retail stores and processing sectors account for the largest proportion of businesses with 50+ employees at 9.7 and 7.6 per cent, respectively.

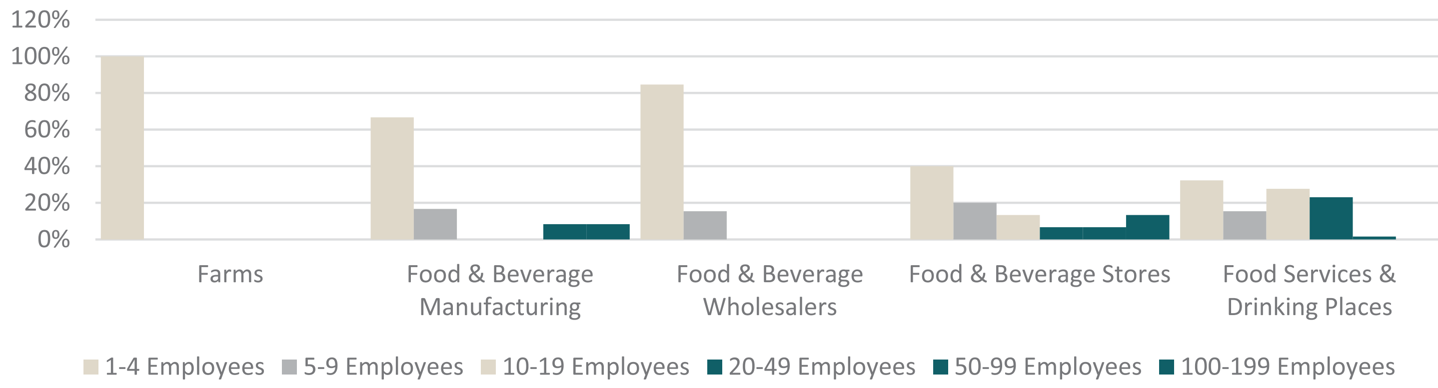
As seen in the table below, half of the Squamish agri-food businesses have less than five employees, while 5 per cent have 50 to 199 employees. These larger businesses are in the food retail and food service sub-sectors with 13 per cent of food retail stores in Squamish employing 100-199 employees and 2 per cent of food services and drinking places employing 50-99 workers. Of note, within the emerging food and beverage manufacturing sector, while still primarily made up of micro and small businesses, 8 per cent of businesses employ between 50-99 workers.

*Table 6 Squamish agri-food businesses by employee size*

| 2019 agri-food business counts by employee size | Squamish | | BC |
|---|---|---|---|
| Firm size | Count | Sector share | BC sector share |
| 1-4 | 61 | 50.8% | 61.5% |
| 5-9 | 17 | 14.2% | 12.2% |
| 10-19 | 20 | 16.7% | 11.8% |
| 20-49 | 16 | 13.3% | 9.7% |
| 50-99 | 6 | 2.5% | 3.1% |
| 100-199 | 0 | 2.5% | 1.3% |
| 200-499 | 0 | 0.0% | 0.3% |
| 500+ | 0 | 0.0% | 0.05% |

Source: Emsi 2021.3, Statistics Canada Business Register, June 2019

*Figure xi Percentage of agri-food businesses by employee size and sub-sector*




Source: Emsi 2021.3, Statistics Canada Business Register, June 2019

Between 2014 and 2019, micro-sized food, beverage and agriculture businesses in the Squamish area reported the largest growth, with 14 new businesses (29.8 per cent). This surpassed the provincial growth rate of 25.3 per cent for micro businesses. In contrast, the number of 5-9 employee businesses in Squamish dropped over this time, not as much as the provincial -4.1 per cent drop. This drop may be attributed to the growth of existing businesses within this sector moving from the 5-9 employment range to a larger size range

*Table 7 Percentage change in business by employee size, Squamish and British Columbia*

| | Squamish | | BC |
|---|---|---|---|
| **Firm size** | **2014 - 2019 Change** | **% Change** | **% Change** |
| 1-4 Micro | 14 | 29.8% | 25.3% |
| 5-9 | -2 | -10.5% | -4.1% |
| 10-19 | 6 | 42.9% | 5.9% |
| 20-49 | 2 | 14.3% | 15.4% |
| 50 plus | 1 | 20.0% | 14.0% |

Source: Emsi 2021.3, Statistics Canada Business Register, June 2014, 2019

# Size and share of employment

**The agri-food sector accounts for 22 per cent of local jobs in Squamish.**

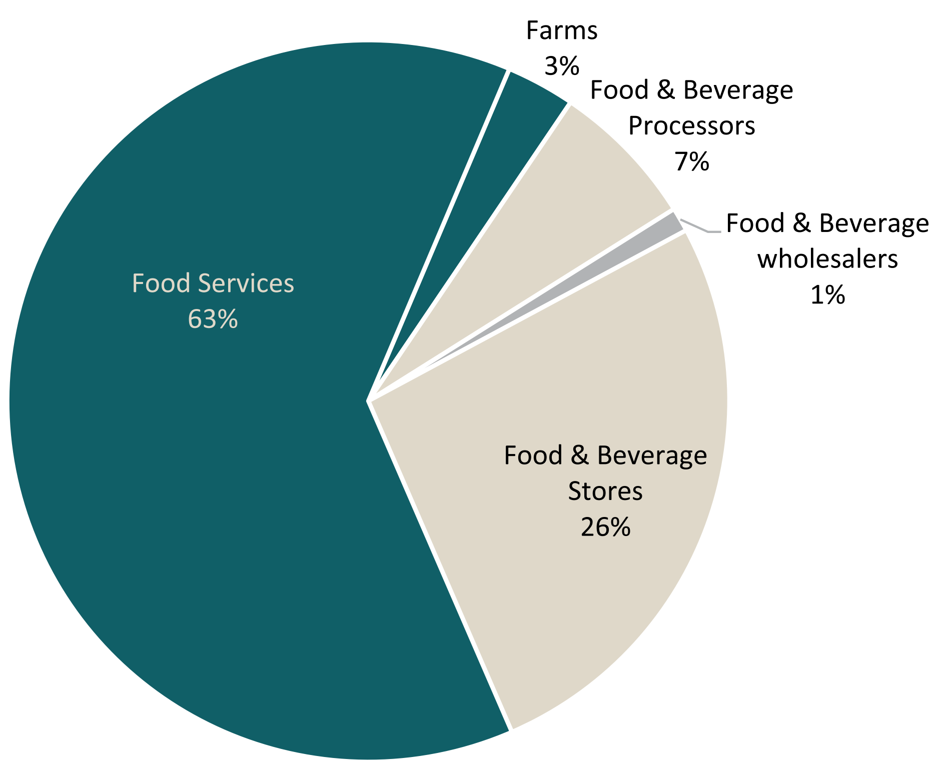
In 2019, there were just over 1,849 workers in Squamish's agri-food sector, accounting for 22 per cent of the workforce employed locally in Squamish. In British Columbia, there were approximately 362,000 workers in this industry in 2019, 15 per cent of BC's employed workforce .

The average number of workers per business in Squamish in this sector is 15.4 compared to the provincial sector average of nine workers.

The food services sub-sector in Squamish accounts for the largest share of total employment in its agri-food sector, with 63 per cent of the workforce or 1,163 workers. This compares to 56 per cent of the provincial sub-sector workforce. Food and beverage stores account for 26 per cent of the sub-sector's workforce or 487 workers compared to 22 per cent of the provincial sub-sector workforce. Food and beverage processors are still an emerging sub-sector in Squamish, with 7 per cent of the workforce or 122 workers. While small, this percentage aligns closely with the province, where food and beverage processors account for 6.7 per cent of the agri-food workforce or 24,421 workers.

Compared to BC overall, Squamish's agri-food sector composition, consisting predominately of food service and drinking places and food and beverage stores, helps to rationalize the higher average number of workers per business reported.

*Figure xii Squamish employment by agri-food sub-sector, 2019*

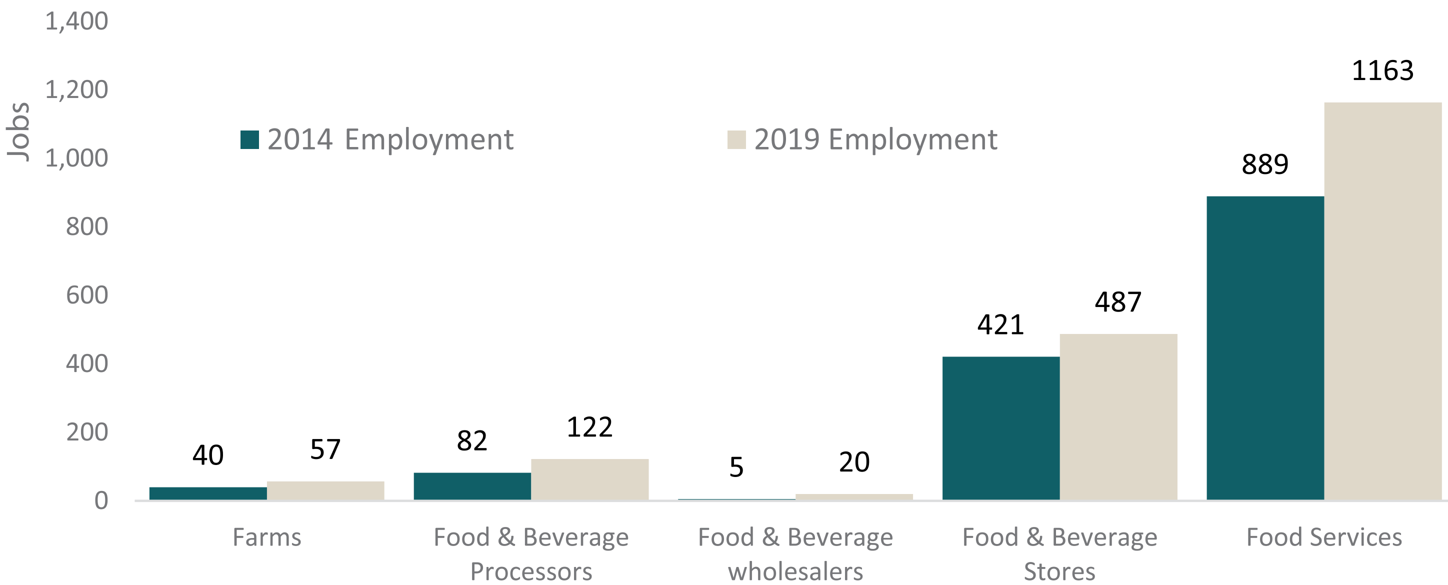



Source: Emsi 2021.3, Regional employment, 2019

**Between 2014 and 2019, employment growth for the agri-food sector outpaced the provincial average (29 versus 13 per cent for BC).**

Fueled by the food services sub-sector, which added 274 workers (30.8 per cent), employment in the agri-food industry rose 28.7 per cent over a five-year period from 2014 to 2019 to reach 1,849 workers — a much faster rate than the provincial growth rate of 13 per cent for this period. Other than food services, food and beverage stores added 66 workers (15.7 per cent), food and beverage processors added 40 workers (48.8 per cent)[8] .

*Figure xiii Change in employment, Squamish agri-food sector, 2014 - 2019*




Source: Emsi 2021.3, Economic Data

**The agri-food industry, when including direct, indirect, and induced effects, supported 2,130 jobs in Sqamish in 2019.**

In addition to direct employment, there are workers who owe their employment to businesses in the sector, but who are not directly employed by these businesses. These include lawyers, marketing agencies, accountants, and other business consultants, who contributed 18[9] indirect jobs by supplying products and services to the sector.

Induced employment effects — jobs reliant on the general consumer spending of agri-food workers - accounted for an additional 263 workers employed[10].

*Table 8 Total employment in Squamish agri-food sector, 2019*

| Effect | Employment |
|---|---|
| Direct | 1,849 |
| Indirect | 18 |
| Induced | 263 |
| **Total** | **2,130** |

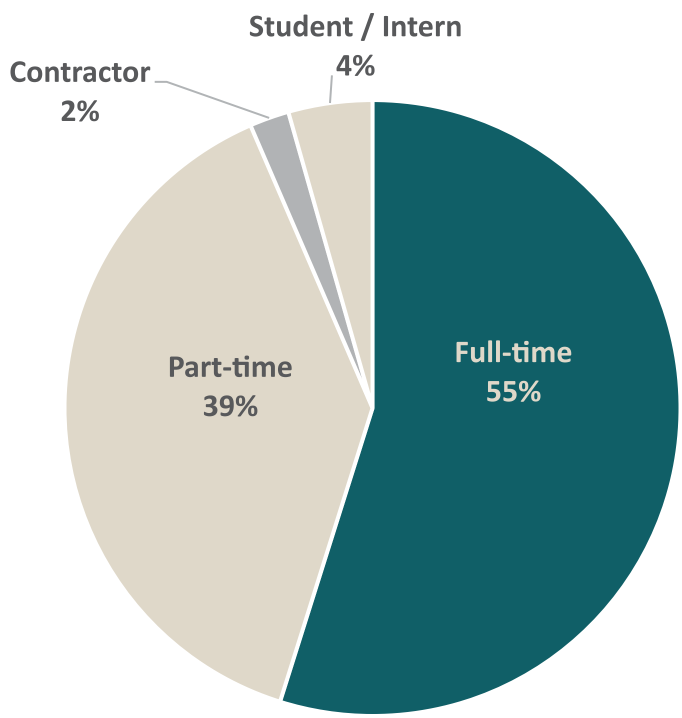
8 Emsi 2021.3 BC and Squamish regional jobs data 2019
9, 10. Emsi 2021.3 Squamish Regional Jobs, Wages, Sales, Data 2019, ESMI Squamish Regional Economic Multipliers 2019

# Classification of workers

**While a majority of businesses in the Squamish agri-food sector employed workers on a full-time basis, the percentage is still much lower than the province overall (55 versus 78 per cent).**

In 2019, there were an estimated 1,014 full-time workers, 715 part-time workers, 38 contractors and 82 student employees working in agri-food businesses in Squamish. At 39%, the district has a higher percentage of part-time workers than the provincial average of 21% (source: Statistics Canada Labour Force Survey). Conversely, at 55 per cent, Squamish has a lower dependency on full-time workers in this sector than the province at 79 per cent. Again, Squamish's agri-food sector composition is likely driving this result. Notable, is that in BC overall farming makes up much greater share of the sector (38 per cent of all businesses versus 12 per cent in Squamish).

*Figure xiv Squamish agri-food sector, employment classification status*




Source: Squamish Agri-food Survey 2021, n=50

# Workforce age

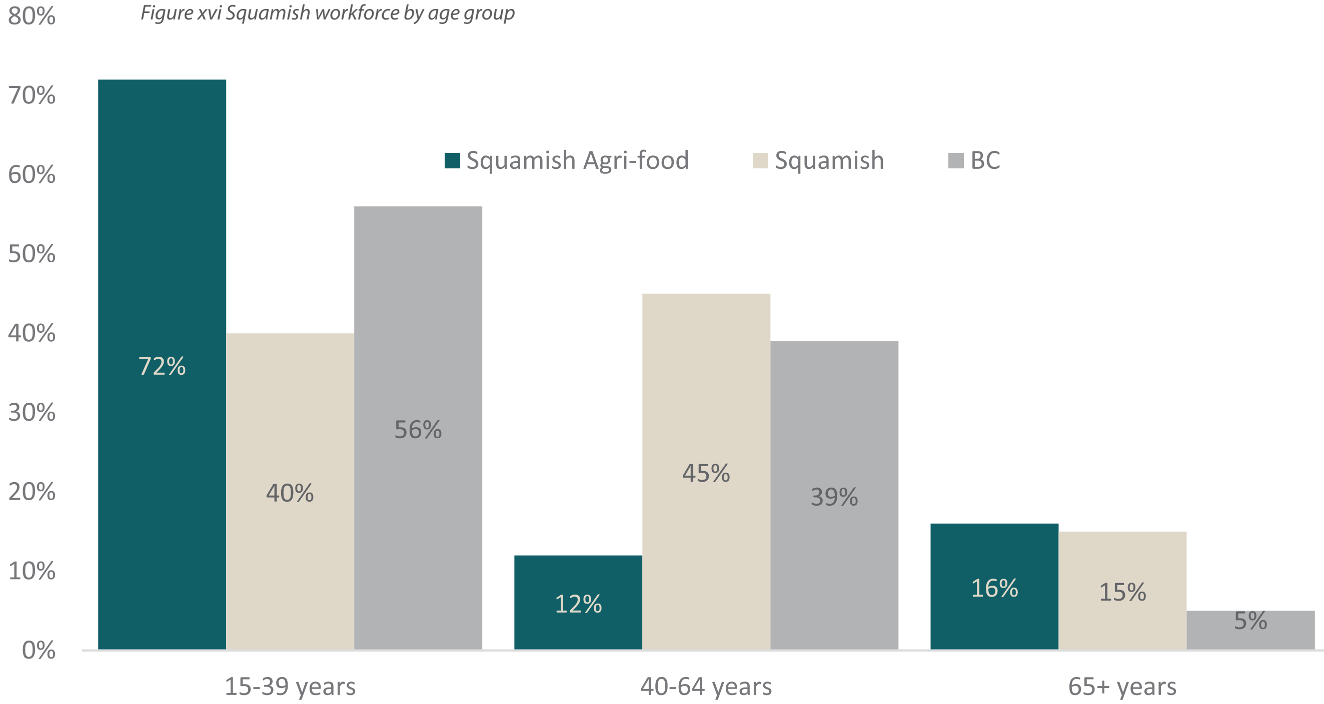
**With 72 per cent of its workers between the ages of 15 and 39, the Squamish agri-food sector employs a disproportionately young workforce.**

Likely driven by a young workforce population (average age is 38 in Squamish v. 42 in BC) and a higher incidence of food services and drinking places and stores in Squamish, relative to other sectors comprising the agri-food sector, the age of the Squamish agri-food workforce is relatively young when compared to the rest of BC.

Forty-nine businesses responded to a question on the age of their staff. The results were used to calculate estimates of three age groups for this sector in Squamish: 1,332 workers aged 15-39 years, 218 workers aged 40-64 years and 299 workers aged 64+ years. The sector leverages a youthful workforce in Squamish: 72 per cent of those working for agri-food businesses are 15 to 39 years old.

This percentage is higher than that of the province overall, with 56 per cent of the workforce in this age group, as well as Squamish overall, with 40 per cent falling into the 15-39 age group. Conversely, Squamish businesses in this sector employ only 12 per cent in the 40–64-year-old age group, compared to 39 per cent of the provincial workforce and 45 per cent of the Squamish workforce. Meanwhile, the sector is also effectively tapping into a senior workforce. Adults over the age of 64 make up 16 per cent of the sector's workforce, yet just 5 per cent of the provincial workforce and 15 per cent of the Squamish workforce. This is likely driven by several factors which may include, a healthy and mobile senior population, the high cost of living in Squamish, and current labour constraints faced by businesses in this sector.

*Figure xvi Squamish workforce by age group*




Source: 2021 Squamish Agri-food Survey, Statistics Canada

# Workforce education

**Those employed in the agri-food sector in Squamish are more educated that workers in the rest of BC's Lower Mainland – Southwest region.**

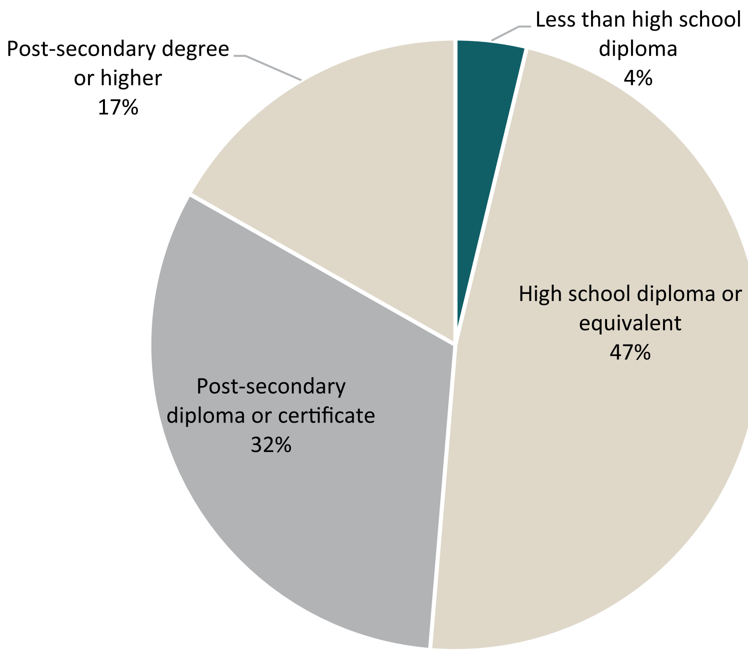
Squamish has a more educated population relative to the rest of British Columbia: 61.4 per cent of the population aged 15 and over have completed a post-secondary certificate, diploma or degree compared to 55 per cent for the province overall[11]. This is reflected in the numbers for Squamish workers in the agri-food sector, who are more educated, on average, than those in BC's Lower Mainland – Southwest region, which includes Metro Vancouver, the Fraser Valley and Sunshine Coast up to Whistler[12]. This enables the local workforce to be more innovative in sustainable practices.

The largest share of workers in the sector in Squamish (47 per cent) have a high school diploma or equivalent as their highest level of education, similar to the Lower Mainland's 49 per cent. Those with a bachelor's degree or more make up 17 per cent of the sector's workforce, while this group accounts for just over 20 per cent according to the 2016 census study.

Post-secondary diploma or certificate holders make up 32 per cent of workforce in this sector in Squamish. This group contributes a much larger share of this sector's workforce compared to the Lower Mainland's 13 per cent. Those with less than a high school diploma make up just 4 per cent of the workforce in this sector, compared to 18 per cent in the Lower Mainland.

Considering the disproportionately high representation of highly educated staff in this sector with comparatively low educational entry requirements, it can be suggested that the Squamish agri-food sector displays a workforce that is partially overqualified. It can also be concluded that there is a mismatch of skills amongst employees in the agri-food sector. In comparison to other regions, the Squamish agri-food workforce is generally defined by a higher-than-average educational qualification.

*Figure xvii Squamish agri-food, workforce education*




Source: Squamish Agri-food Survey 2021, n=39

11 Statistics Canada 2016 Census

12 Portrait of French-language workers in Western Canada's agriculture and agri-food industries, 2011, Table 19

# Hiring Preferences

**Agri-food jobs significantly contributed to the overall volume of job postings in Squamish in 2019.**

There were 3,012 unique job postings in Squamish in 2019. The majority of these postings had no requirements for education (74 per cent) or experience (53 per cent), however, of skills in demand, food service skills were cited with the second more frequent skill within postings while restaurant operation was the fifth. Job postings in Squamish are highly cyclical, peaking in January, followed by a rapid decline February to May, then increasing through summer and fall until January.

The agri-food sector contributed to several of the top-hiring occupations by volume of postings. Among occupations, restaurant and food service managers ranked fourth in terms of number of postings (87 unique) while food counter attendants ranked sixth with 85 unique postings in 2019. There were 60 unique postings for chefs and 32 searching for cooks. Of top industries posting, accommodation and food services, with 178 postings in 2019, ranked third behind retail trade (264 postings) and health care and social assistance (228 postings). Of online job posting providers, Glassdoor, Workopolis and Wow Jobs were the top three platforms for listing job opportunities in Squamish.

Of note, while online job posting activity provides some insight into hiring activities across sub-sectors comprising the agri-food sector, it may not be fully representative, as other off-line tactics, as reported in the next section, may be used with greater frequency among this sector.

**Word of mouth is the top source for hiring among Squamish agri-food businesses.**

A combination of a highly competitive labour market and smaller business centre may lend itself to a greater reliance on using word of mouth, including employee referral to attract staff in Squamish. Agri-food businesses in the Squamish area were asked to rank their preferences on sources for hiring new employees. As noted in the chart above, word of mouth received the highest average ranking with a value of 5.9 out of 7, while LinkedIn received the lowest with an average ranking of 2.4. Sixty businesses responded to this question.

*Table 9 Most Preferred Source Ranking for Hiring*

| Resource | Most Preferred Source Ranking for Hiring |
|---|---|
| Word of mouth | 5.9 |
| Facebook job boards | 5.3 |
| Instagram ads | 4.9 |
| Job posting sites (Indeed, Glassdoor, WorkBC) | 4.7 |
| Other | 3.6 |
| College/university/trade schools | 3.0 |
| Linkedn | 2.4 |

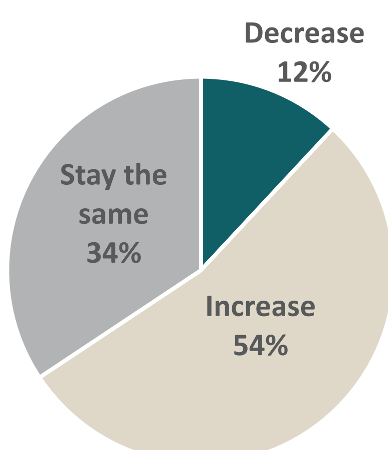
Source: Squamish Agri-food Survey 2021, n=60

**Squamish agri-food business owners have mixed hiring expectations, with only 54 per cent indicating that they planned to hire over the next 12 months compared to 71 per cent of respondents in a Bank of Canada survey.**

When Squamish business owners in this sector were asked in summer 2021 about their hiring expectations over the next 12 months, 67 responded. Of those, 54 per cent expected to increase hiring over the next 12 months, while 34 per cent felt hiring would stay the same and 12 per cent thought it would decrease. In contrast, in a 2021 third-quarter Bank of Canada survey, 71 per cent of businesses thought they would hire more staff over the next 12 months, while 25 per cent predicted their hiring would stay the same and 4 per cent thought it would decrease.

Regardless of hiring expectations, BC's 2021 Labour Market Outlook estimates that there will be more than one million job openings in BC over the next ten years, with two-thirds of those jobs in the Mainland / Southwest region where Squamish is situated[13].

*Figure xvii Squamish agri-food businesses, employment expectations for 2022*




Source: Squamish Agri-food Survey 2021, n=67

13 BC Labour Market Outlook 2022, Work BC https://www.amssa.org/wp-content/uploads/2015/05/BC-Labour-Market-Outlook-2022.pdf

# THE ECONOMIC IMPACT OF SQUAMISH'S AGRI-FOOD SECTOR

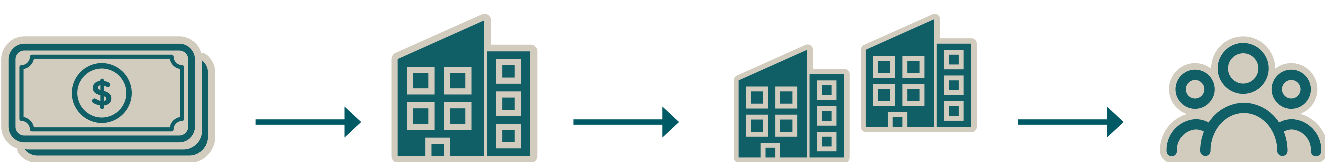
One method used to evaluate a sector's performance is to look at the total output, or resulting sales, wages, employment, gross-domestic product (GDP) and taxation created by its business activities.

The Agri-Foods Sector Impact Study breaks down economic performance three ways:

- **Direct impact** — expenditures made by the sector on labour, materials, suppliers and capital to produce its goods
- **Indirect impact** — business-to-business purchases in the supply chain stemming from the initial industry input purchases
- **Induced impact** — purchases made by employees at a household level who work in businesses that are part of the sector's supply chain

Due to the ongoing pandemic, 2019 was used as a benchmark year to evaluate the agri-food sector. Impacts arising from COVID-19 have been included within.

*Figure xx Measuring economic impact*



**SUPPLIER PURCHASES**

A company purchases from its suppliers triggers a ripple effect through its supply chain.

**DIRECT IMPACT**

Direct impacts result from expenditures by the company's labour, materials, suppliers and capital.

**INDIRECT IMPACT**

Indirect impacts result from lower tier suppliers that also employ labour and purchase goods to meet demands.

**INDUCED IMPACT**

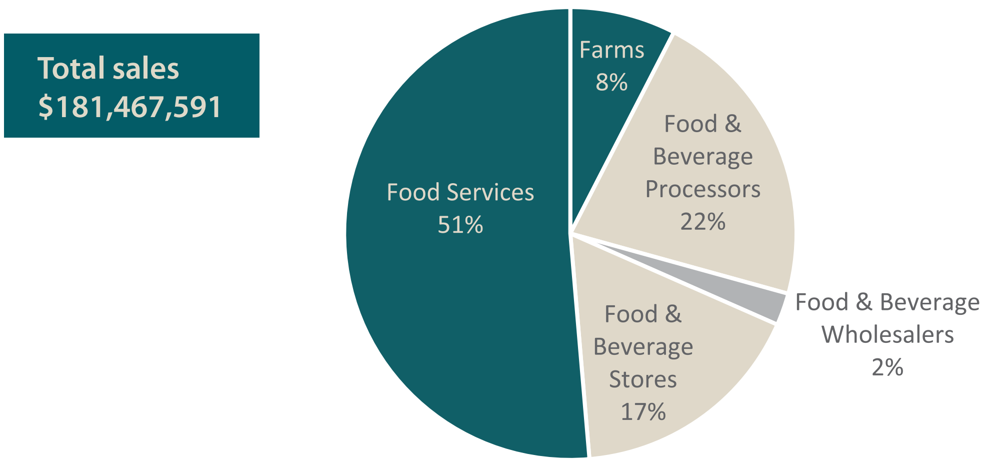
Induced impacts result from the employees of businesses in the supply chain purchasing goods at a household level.

# Total sales

Of these total sales, food services (caterers, full-service and limited-service restaurants) accounted for the largest share with over $93.3 million in sales. The second-largest contributing sub-sector was food and beverage processing with $39.4 million in sales, followed by retail food and beverage stores, with sales of close to $31 million[14] .

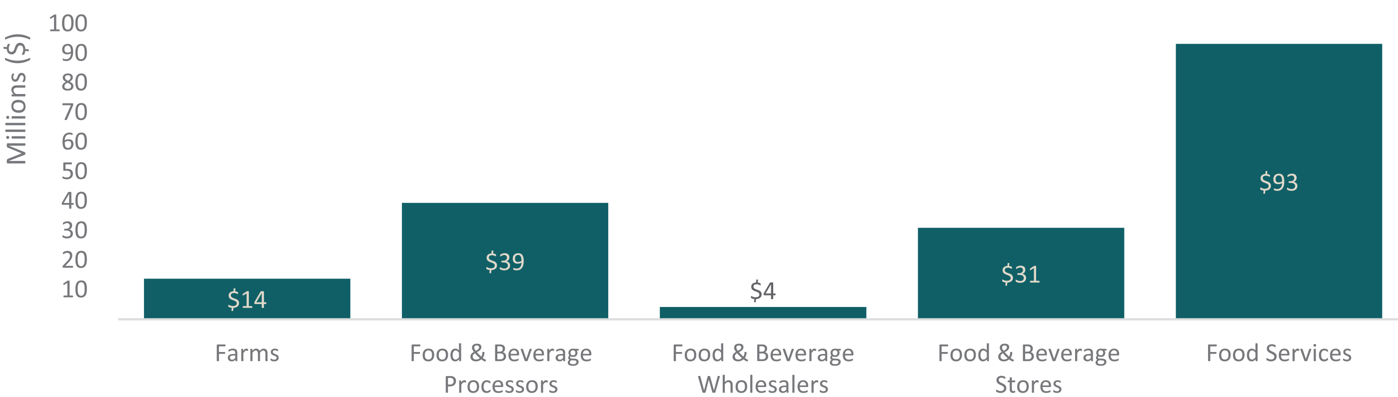
**In 2019, total sales, or the direct impact of the agri-food sector, amounted to $181,467,591[28] .**

*Figure xviv Squamish agri-foods sales, 2019*




Source: Emsi 2021.3, 2019 Squamish Regional Jobs, Wages, Sales

*Figure xxii Squamish agri-food sales, 2019*




Source: Emsi 2021.3, 2019 Squamish Regional Jobs, Wages, Sales

Between 2014 and 2019, the Squamish agri-food sector grew 50 per cent – more than $60 million. This represents a high rate of growth when compared to other communities across the province, exceeding the sales growth from known agricultural hotspots in the Fraser Valley such as Abbotsford/Mission and Chilliwack, and in BC as a whole.

To further confirm this rate of growth relative to other jurisdictions, total sales were assessed on a per capita basis for each community and the entire province. While the sales generated in other communities with larger population bases and a greater concentration of agri-food businesses such as Abbottsford-Mission and Chilliwack far exceeded those generated from Squamish, Squamish out-paced every community in terms of sales per capita growth, and BC overall between 2014-2019.

14 Source: EMSI 2021.3 2014, 2019 Squamish Regional Jobs Wages Sales

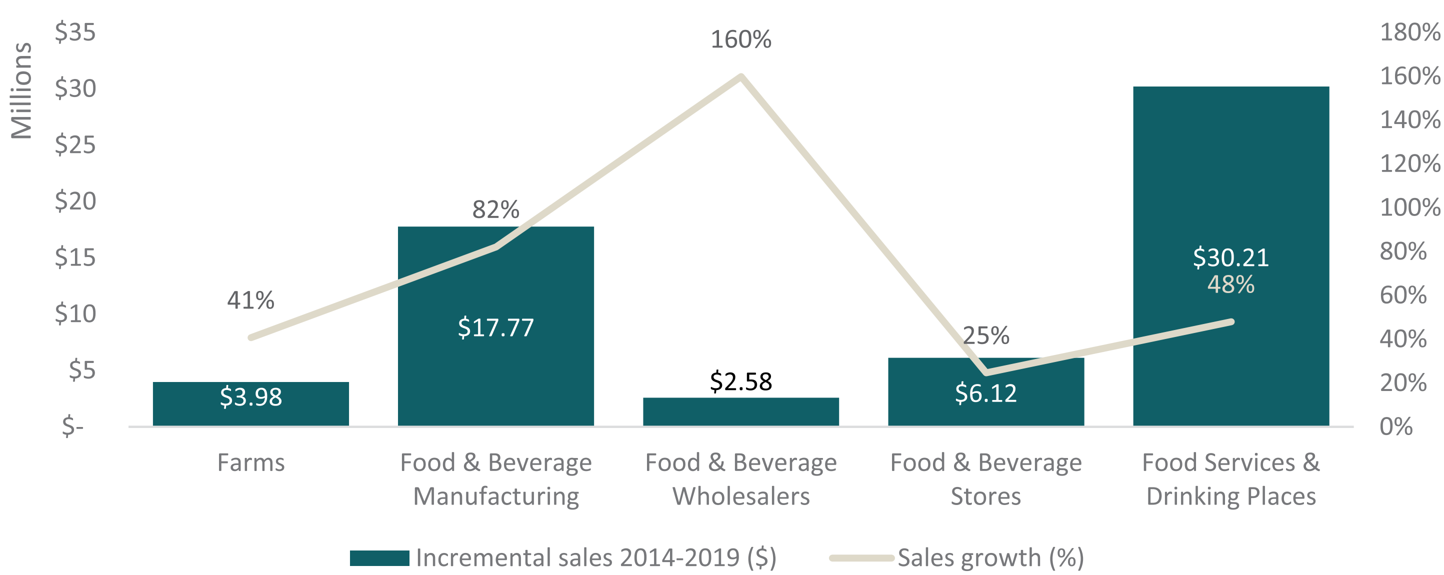
*Table 10 growth in agri-food sales by select BC communities*

| | 2014 Sales | 2019 Sales | Sales Growth 2014-2019 | 2014 Sales Per Capita | 2019 Sales Per Capita | Per Capita Sales Growth Rate |
|---|---|---|---|---|---|---|
| Squamish | $120,815,550 | $181,467,591 | 50% | $6,165.95 | $7,945.51 | 29% |
| Port Alberni | $112,256,463 | $143,148,539 | 28% | $4,394.63 | $5,335.79 | 21% |
| Campbell River | $423,768,704 | $518,510,003 | 22% | $10,906.69 | $12,460.89 | 14% |
| Chilliwack | $891,890,763 | $1,185,879,511 | 33% | $8,863.42 | $10,353.50 | 17% |
| Abbotsford-Mission | $2,030,540,142 | $2,632,985,043 | 30% | $11,242.37 | $13,002.59 | 16% |
| BC | $32,325,724,475 | $42,842,649,240 | 33% | $6,867.44 | $8,409.10 | 22% |

Source: Emsi 2021.3 Regional Jobs, Wages, Sales

The largest contributor to this growth came from the food services sector, which experienced an increase of 48 per cent or $30.2 million in sales between 2014 and 2019. Food and beverage processors and farms followed in terms of growth, with an 82 per cent increase or $17.7 million in sales. Food stores grew by 25 per cent or $6 million over this same period[15].

*Figure xxii Squamish agri-food sales growth 2014-2019 by sub-sector*




Source: Emsi 2021.3, 2014, 2019 Squamish Regional Jobs Wages Sales

15 Ibid

**When combining direct, indirect, and induced impacts, Squamish's agri-food sector generated $207,286,359 in economic impact for Squamish in 2019.**

The indirect impact, or sales generated from suppliers to the agri-food sector, totalled $2,377,040[16] in 2019 while the induced impact was valued at $23,441,727[17].

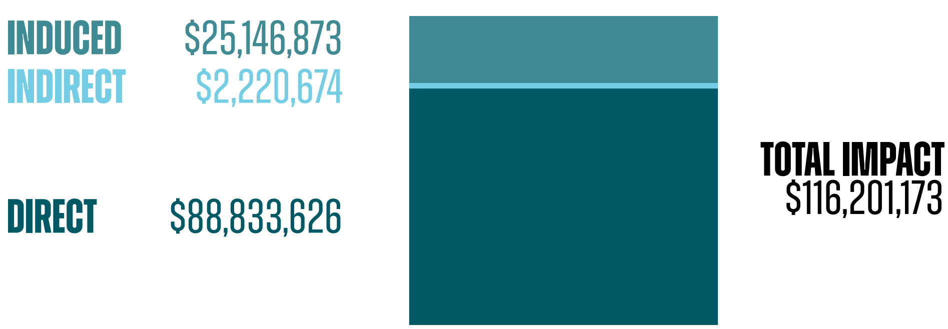
*Figure xxiv Economic impact of Squamish agri-food sector*


Source: Emsi 2021.3, EMSI 2021.3 2019 Squamish Regional Jobs Wages Sales, EMSI 2019 Squamish Regional Multipliers, Q3 2021, Ibid

# Gross domestic product

The sector accounted for $116,201,174 in local GDP. Direct contributions totalled $88,833,626 while indirect and induced effects of the GDP calculation for 2019 was $2,220,674 and $25,146,873 respectively.

*Figure xiii gross domestic product produced by Squamish agri-food sector*



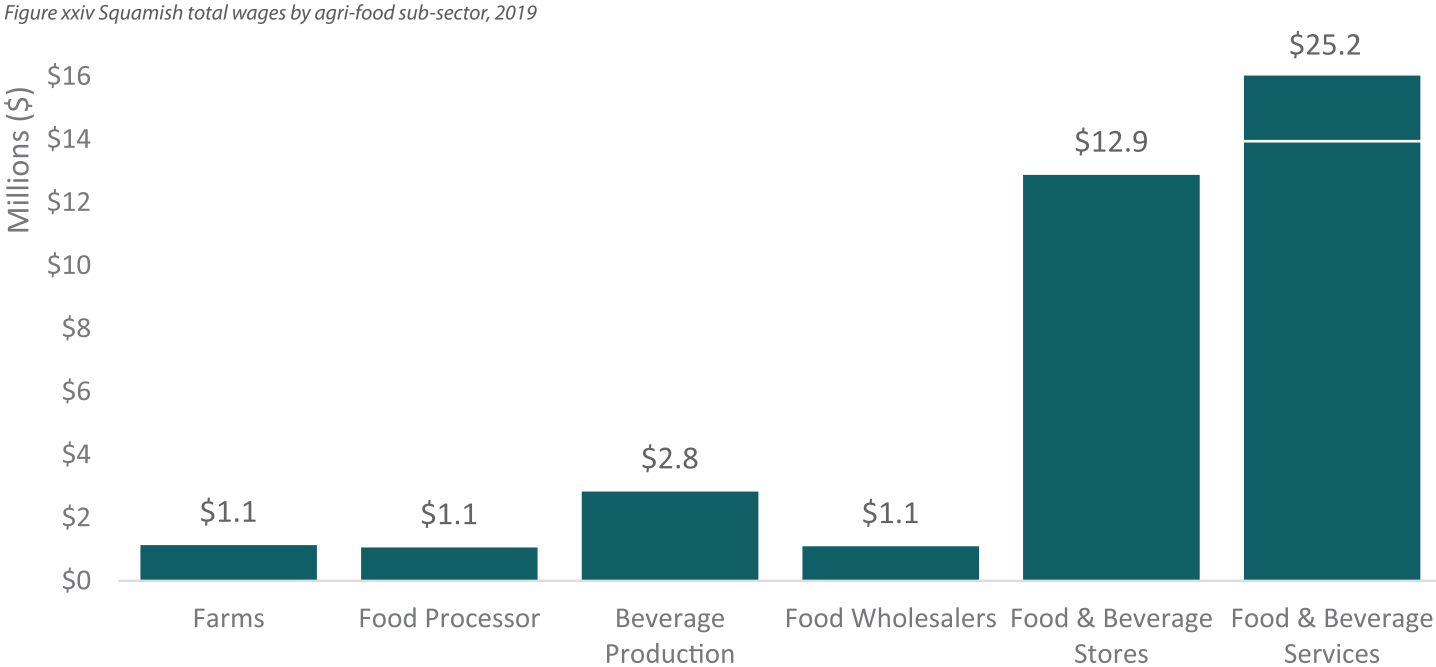

One way of measuring a business activity's impact on an economy is the use of Gross Domestic Product, or GDP. This concept factors out inputs not associated with the sector and captures the dollar value added to the inputs of an industry, primarily income and profits for the workers and business owners.

16 Source: EMSI 2021.3 2019 Squamish Regional Jobs Wages Sales, EMSI 2019 Squamish Regional Multipliers, Q3 2021
17 Ibid

# Wages supported

Direct wages paid to those working in the agri-food sector amounted to $44,226,372 in 2019. Wages by sub-sector ranged between $1.1 million for farming, food and beverage production sub-sectors, to $3 million for beverage production, to $13 million and $25.2 million for food and beverage retail stores and food services establishments respectively.

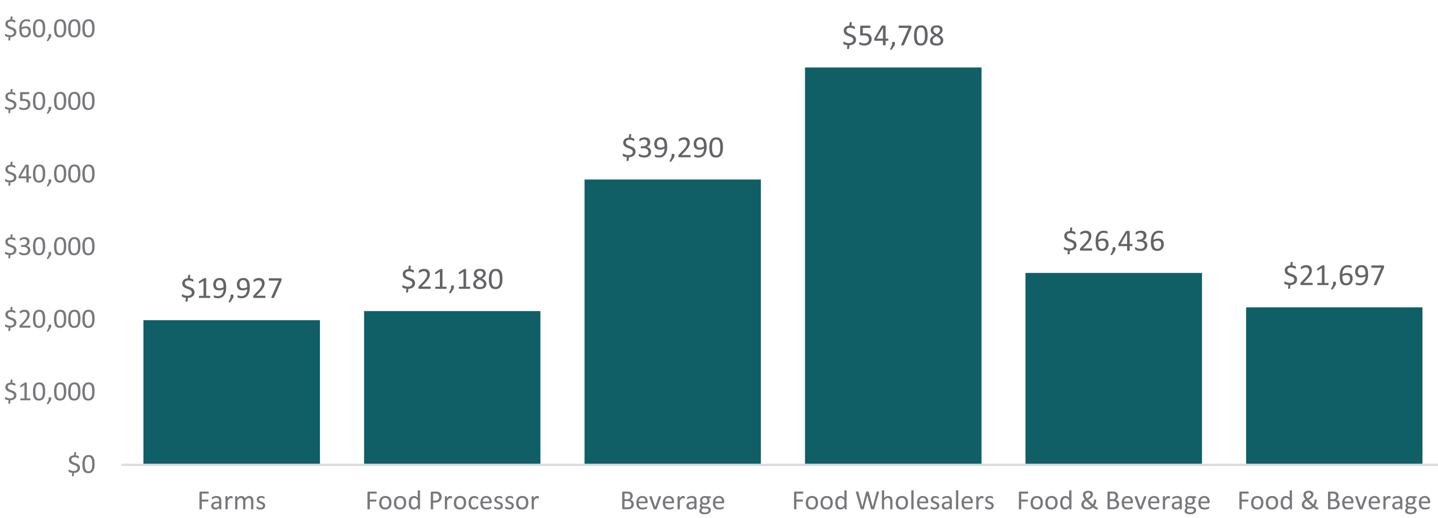
*Figure xxiv Squamish total wages by agri-food sub-sector, 2019*




Source: Emsi 2021.3, 2019 Regional Wages, Jobs, Sales

Average annual wages for these sectors ranged from a low of $21,697 for food service workers to a high of $54,708 for those working in wholesale in this industry. For context, average wages across Squamish sectors ranged from $25,675 in accommodations and food service sector to a high of $86,425 for the utilities sector. Average annual wages across all sectors were $44,638. Low annual average wages for sub-sectors reflect more low-skilled, low paying positions, many which are part-time and seasonal in nature.

*Figure xxvi Squamish Agri-food average wages by sub-sector, 2019*




Source: EMSI 2019 Regional Wages, Jobs, Sales

Indirect wages paid to workers who work in sectors that support the craft food, beverage and agricultural sector totalled $483,909[24]. Induced wages paid to workers in businesses supplying household products and services to the direct and indirect workers of the sector totalled $5,159,442[18] .

The total wage effect (direct, indirect and induced) for this sector in 2019 was $49,869,723.

In 2019 there were 1,849 local workers employed directly by the agri-food sector, 18 employed by companies providing goods and services to support these businesses, and 263 workers employed by the household spending of the sector and support workers in the Squamish community. [19]

# Total economic impacts

In addition to local effects, Squamish craft food, beverage and agricultural businesses spend money on inputs originating from other parts of the province. In the table below, these effects add up to 605 employees, $29,709,600 in wages, $59,904,667 in GDP and $122,441,708 in sales[20].

*Table 11 Total economic effect of Squamish agri-food sector, 2019*

| Effect | Employment | Wages | GDP | Sales |
|---|---|---|---|---|
| Direct | 1,849 | $ 44,226,372 | $ 88,833,626 | $ 181,467,591 |
| Indirect | 18 | $ 483,909 | $ 2,220,674 | $ 2,377,040 |
| Induced | 263 | $ 5,159,442 | $ 25,146,873 | $ 23,441,727 |
| **Squamish Total** | **2,130** | **$ 49,869,723** | **$ 116,201,174** | **$ 207,286,359** |
| Rest of BC | 605 | $ 29,709,600 | $ 59,904,667 | $ 122,441,478 |
| **Total** | **2,735** | **$ 79,579,323** | **$ 176,105,840** | **$ 329,727,837** |

Source: Emsi 2021.3, Statistics Canada

18 Ibid
19 Ibid
20 ESMI 2021.3 2019 Regional Jobs, Wages, Sales, 2019 Regional Squamish Multipliers, 2019 Farm, Food & Beverage Manufacturing, Food & Beverage Wholesale, Food & Beverage Retail, Food & Beverage Services Supply Chain Data, Statistics Canada National Input Output Multipliers table 36-10-0594-01

# SOCIAL AND ECOLOGICAL IMPACT, AND DOUGHNUT ECONOMICS

Business sectors are increasingly being scrutinized over the impact of their activities and practices on social and environmental issues such as poverty, inequality, climate change and natural resource use. While this study focuses on the agri-food sector's economic impact on the region, it also begins to explore this sector's social and environmental impacts as well.

*Figure ii Components of sustainable economic development*


The agri-food sector shines as an example of a group of businesses that contribute not only economically, but also socially and environmentally, to the local community. The majority of Squamish businesses in this sector invest in sustainable practices, source within British Columbia for the majority of their inputs and participate regularly in social giving. While the following discussion presents several insights, it is only a beginning in terms of data and quantifiable impacts.

# Sustainable practices

**Most businesses (93 per cent) in the Squamish agri-food sector have adopted sustainable practices as part of business operations.**

Respondents were asked to report on a variety of sustainability practices they apply to their businesses, such as local sourcing, reducing waste, sourcing organic, producing certified organic and free trade products, regenerative agriculture, regenerative energy, and/or conducting and assessing environmental impacts. Out of the 60 companies that responded, only four did not adopt any waste reduction measures. This means 93 per cent of Squamish's agri-food sector has adopted sustainable practices as part of their business operations. Waste reduction was the most prevalent practice — 75 per cent of respondents (87 businesses when extrapolated for the Squamish sector) cited this sustainability practice as part of their operations. Local sourcing was the next most prevalent practice at 73 per cent (83 businesses when extrapolated for this sector).

**Waste reduction, local sourcing, and sourcing organic, fair trade, and/or non-GMO products were the top three sustainable practices cited.**

Nearly half (44 per cent) of respondents source organic, fair trade, and/or non-GMO products for their operations (extrapolated to 50 Squamish businesses in this sector). 13 per cent of the sector make their own Certified Organic, Fair Trade or non-GMO products.


*Figure xxvii Sustainable practices among Squamish agri-food businesses, Source: Squamish Agri-food Survey, 2021*

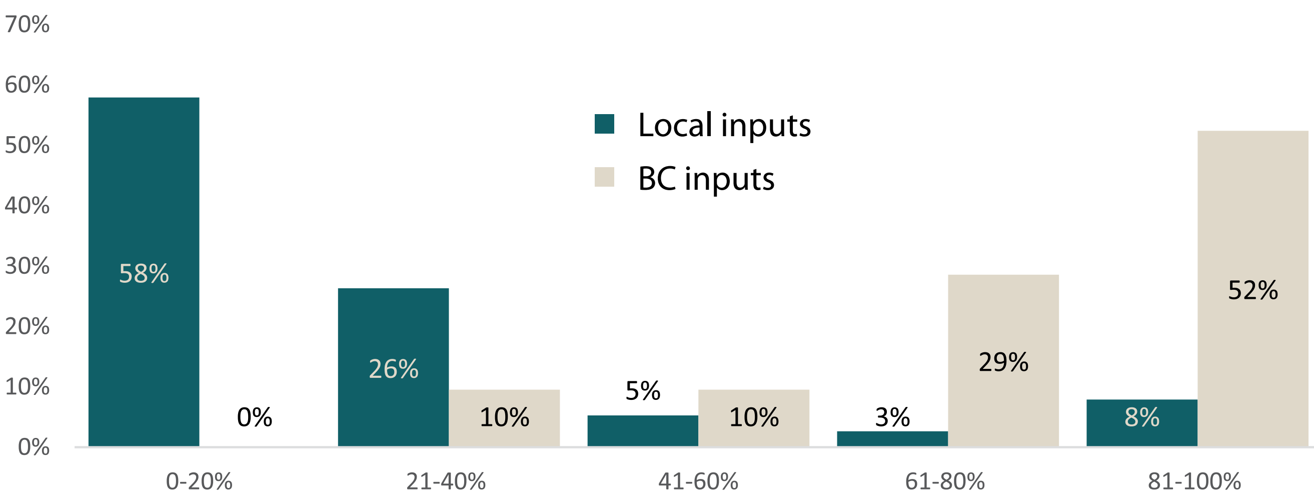
In addition to selecting from a list of sustainable practices, respondents were prompted to report any other practices they were engaged in that were not on the list. Thirty-six companies provided comments. Additional sustainability initiatives were wide-ranging and included using compostable and organic materials, Ocean Wise products, human-powered transportation, free-range meats, repurposing materials, providing donations to non-profits such as the Squamish Trails Society, use of local recycler GFL, using e-bikes, making all products hormone-free, monitoring their company's environmental footprint, and one case in which a business reported that their cooking grease by-products get used by a company that makes biodiesel. The majority of businesses reporting other practices cited using compostable materials for their operations.

# Local sourcing practices

**Of the 73 per cent businesses reporting that they source products and services locally, 58 per cent indicated that less than 20 per cent of their supply chain purchases are local, presenting untapped potential to strengthen the local supply chain.**

Out of the 38 businesses that responded to a question on their use of local sourcing, defined as inputs sourced from Britannia Beach to northern Squamish, the majority (58 per cent) of businesses in the sector source less than 20 per cent of their total supply chain from local suppliers. Still, nine local businesses reported that they use local sourcing for more than 80 per cent of their supply chain needs. While this number appears low, the prevalence of local sourcing is extremely high when we expand our definition to include the province. Out of the 42 businesses that responded to the question on the use of BC inputs for their operation, more than half (52 per cent) source over 80 per cent of their supply chain from BC sources. Extrapolating to this sector as whole, 62 businesses are in this group. Of the businesses who responded to this question, every one of them has sourced at least 21 per cent of their inputs from BC suppliers.

*Figure xxviii Squamish agri-food share of local or BC inputs*

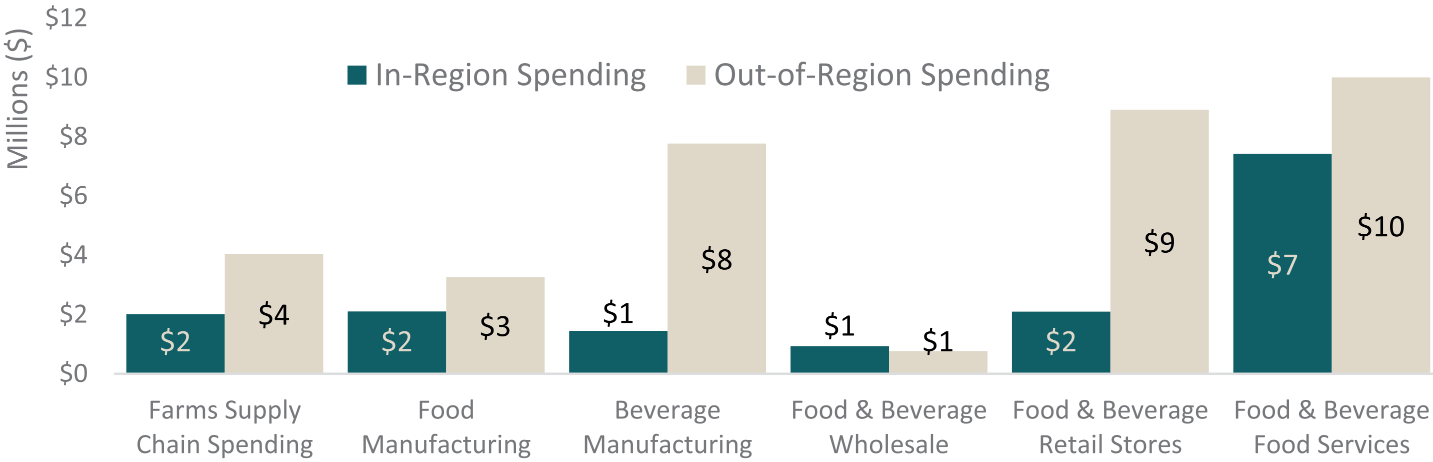



Source: Squamish Agri-food Survey 2021, n=38

**Seventy-nine per cent or $63.2 million was spent out of region by Squamish's agri-food sector in 2019.**

Squamish is close to Vancouver's Lower Mainland, giving business access to a large selection of regional suppliers. In the table below, five out of the six sub-sectors spent the majority of their budget on out-of-region businesses. Only the wholesale businesses for this industry spent slightly less than the majority of their budget on out-of-region inputs. Food services spent $38.5 million out of region in 2019, while those in the wholesale sub-sector spent about $769,000. Just over 70 per cent of this sector's spending was outside of the Squamish area.

*Figure xxix Squamish farm, food and beverage manufacturing spending*




Source: Emsi 2021.3, 2019 Squamish Supply Chain Data

*Table 11 In-region and out-of-region spending by Squamish agri-food businesses, 2019*

| Sub-Sector | In-Region | Out-of-Region | Total Purchases | % In-Region | % Out-of-Region |
|---|---|---|---|---|---|
| Farms Spending | $ 2,016,131 | $ 4,045,520 | $ 6,061,651 | 33% | 67% |
| Food Manufacturing | $ 2,100,211 | $ 3,267,349 | $ 5,367,560 | 39% | 61% |
| Beverage Manufacturing | $ 1,445,114 | $ 7,765,435 | $ 9,210,549 | 16% | 84% |
| Food and Beverage Whole | $ 929,904 | $ 768,827 | $ 1,698,731 | 55% | 45% |
| Food and Beverage Retail | $ 2,096,592 | $ 8,909,337 | $11,005,929 | 19% | 81% |
| Food and Beverage Services | $ 7,420,610 | $ 38,455,447 | $45,876,057 | 16% | 84% |
| **Total** | **$ 16,008,562** | **$ 63,211,914** | **$79,220,477** | **21%** | **79%** |

Source: Emsi 2021.3, 2019 Squamish Supply Chain Data

The local economic effects of a business activity are much lower when the majority of the spending is outside of Squamish, which impacts the local multiplier effect. However, business spending in this sector outside of the local economy still has direct, indirect and induced effects in other parts of British Columbia. The table below lists the dollar magnitude of these effects on employment, wages, GDP and output for the rest of the provincial economy.

*Table 12 Squamish agri-food out-of-region economic effects*

| Effect | Employment | Wages | GDP | Output |
|---|---|---|---|---|
| Direct | 307 | $15,550,131 | $34,134,434 | $63,211,914 |
| Indirect | 171 | $8,786,456 | $9,967,255 | $35,272,248 |
| Induced | 127 | $5,373,013 | $15,802,979 | $23,957,315 |
| **Total** | **605** | **$29,709,600** | **$59,904,667** | **$122,441,478** |

Source: Emsi 2021.3, Statistics Canada

# Certification programs

When it comes to certification, agri-food businesses in the Squamish area have many options. Certified Organic, Fair Trade, Non-GMO, Animal Welfare Approved, Grass Fed Certification, Ocean Wise and Rainforest Alliance were options these businesses were given in a survey question in fall 2021. Only 13 responded, with 11 reporting they use a Certified Organic program to produce their product or service. Nine businesses use products or services that are Fair Trade or non-GMO certified, while seven are Animal Welfare Approved or Grass Fed certified.

*Figure xxx Certification programs participated in by Squamish agri-food businesses*


Respondents were also asked to provide comments on other certifications in which they participate. Ten companies responded with the following: Certified B Corporation, Conservation International Coffee Farmers, Vegan, Organic, Pesticide Free and supporting local.

# Social impact activities

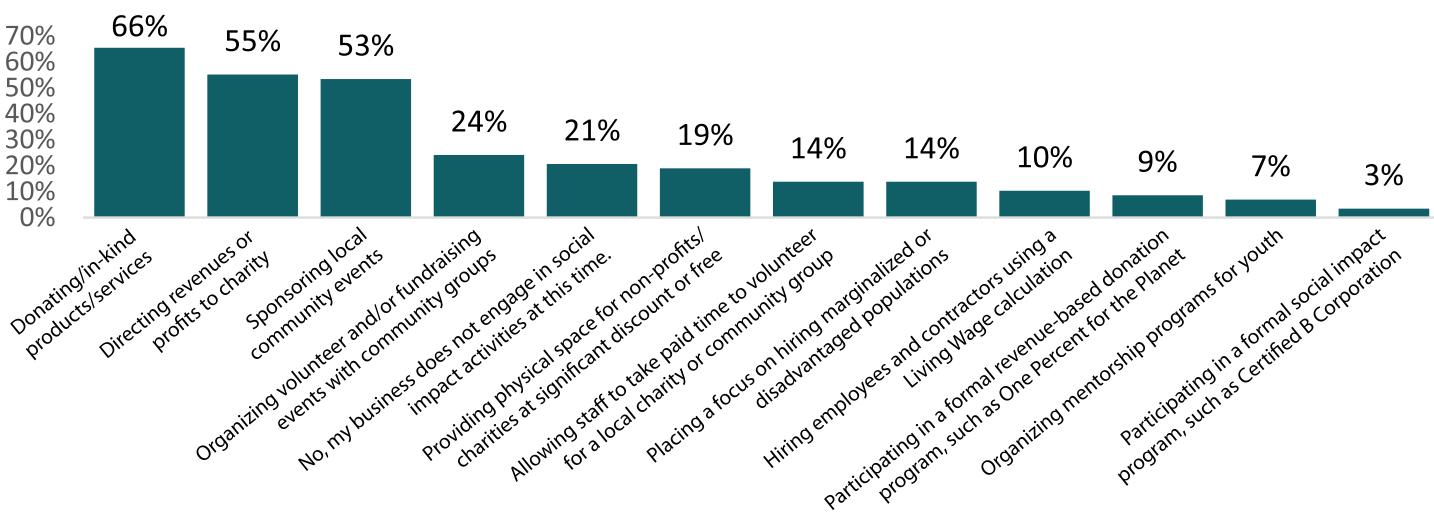
Fifty-eight businesses responded to the question in the 2021 Squamish survey on agri-food sector: Does your business engage in any social impact activities or community giving programs?

**More than half (66 per cent) of agri-food sector businesses donate products or services to the Squamish community.**

Sixty-six per cent or 76 companies indicated that they donate products and/or services in-kind to non-profits or charities in the Squamish community. In addition, 55 per cent or 64 companies reported that they direct a portion of revenues or profits to charities in Squamish, while 53 per cent sponsor local community events.

Thirty-four respondents provided comments on activities other than those listed, which ranged from donating gift certificates for charity fundraisers to organizing community soup kitchens to hiring from marginalized groups such as refugees, at-risk youth and veterans.

*Figure xxxi Social impact activities of Squamish agri-food businesses*




Source: Squamish Agri-food Survey 2021, n=58

Organizations that benefitted from the social impact of Squamish agri-food businesses include the SPCA, recreation teams (e.g. Squamish youth cycling team), Cheekeye Ranch, Mamquam Elementary School, Howe Sound Secondary, Squamish Search and Rescue Society and Squamish Off-Road Cycling Association.

*Figure xxxii Social impact activities by Squamish agri-food businesses*

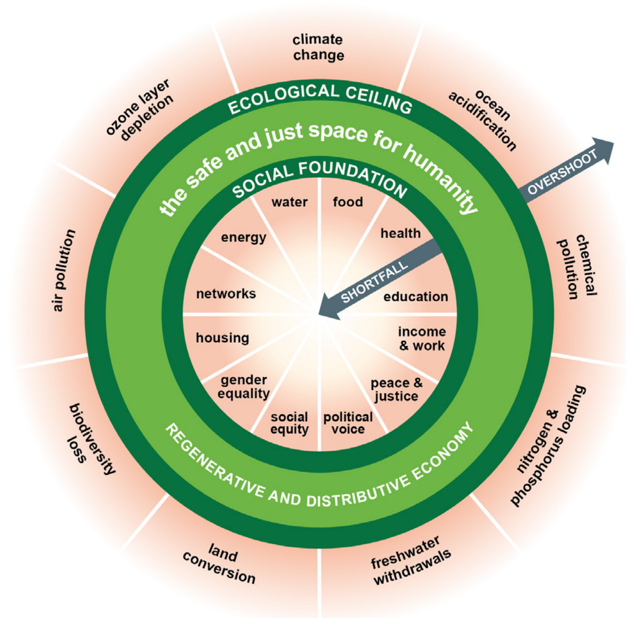

## CASE STUDY

An example of an agri-food sector social impact initiative is the TooGoodToGo app. In recognizing that one third of food that is produced is wasted they partner with food related businesses to capture edible, surplus food locally and redistribute that food within those communities, encouraging participants to both eat well, and end food waste.

# Applying a lens of Doughnut Economics

In early 2021, the District of Squamish adopted the [Doughnut Economic Framework](#) to help develop forward actions and measure the progress of its Emerging Sector Roadmap and Action Plan. The framework, developed by Oxford University economist Kate Raworth, moves from an economy premised only on monetary growth to one that ensures a social foundation (e.g. all citizens have access to life's essentials) while respecting the earth's ecological ceiling. The principles of Doughnut Economics aim to create an environment that humanity and the planet can thrive in by considering the needs of the planet and the people within a dynamic system. This report begins to explore this sector in relation to thematic areas of the Doughnut and its [principles](#) to help direct future economic development efforts.

*Figure iii Doughnut Economics explained*




Source: [www.kateraworth.com.](#)

Note: The extent to which boundaries are transgressed and social foundations are met are not visible on this diagram.

Several emerging trends are and will impact on the agri-food sector in Squamish, and when considered through a lens of Doughnut Economic principles, begin to demonstrate opportunities to improve the sector's social and environmental impacts. These trends, while generally positive locally, present future impacts in terms of the established global food supply chain in relation to income, employment, and equity.

Trends identified include:

- **Growth of plant-based diets.** Plant-based food revenue in Canada increased 25 per cent by the end of 2020 to $600 million (source: NeilsonIQ database on spending on meat and dairy alternatives). In a 2019 Statista survey, British Columbia had the second-highest positive perception (69 per cent) associated with eating plant-based foods in Canada.

- **Increasing preference for environmentally sustainable food sources.** In PWC's 2019 Consumer Insights Survey, 47 per cent of those aged 18 to 24 said they're willing to pay a premium for environmentally friendly food offerings, which was higher than the 35 per cent finding for respondents between the ages of 25 and 34.

- **Movement toward local sourcing or deglobalization.** A new term has emerged from COVID-19-caused supply-chain disruptions: deglobalization. From delays in manufacturing to increased container costs, to labour shortages in the trucking industry, the de-emphasis on international sourcing has become more common during the pandemic. This has benefitted local suppliers with an uptick in demand while also those who rely on these suppliers by adding additional security to their supply.

Findings from this study highlight several considerations moving forward for the agri-food sector relating to local - social constructs part of the doughnut.

- **Enabled by income, work, and education:**

  - Food and drinking places over-index (1.45) compared to other industries making up the agri-food sector and compared to the agri-food sector in BC. Food and drinking places provide access to a broad range of entry to management roles for local workforce, adding diversity to the local job base and increased opportunity for underemployed and youth.

  - That said, wages within this industry are relatively low and often do not reflect the cost of living within Squamish and BC. The annual average wage for the food and beverage service industries was $22,956 in 2019. The food and beverage service industry accounted for 1,163 jobs of the total 1,849 jobs directly provided by the agri-foods industry in Squamish. The food and beverage service industry accounted for 1,163 jobs of the total 1,849 jobs directly provided by the agri-foods industry in Squamish. Squamish agri-food jobs are also more likely to be part-time compared to the rest of the province (55 versus 78 per cent).

  - Applying the lens of doughnut economics, it will be important to create greater employment equity for workers in this sector to aim for access to decent work and livable income for all. If not through the provision of living wages, then this goal should be pursued via access to other subsidies, such as housing, transportation, medical benefits, childcare, and flexible schedules. An opportunity also presents itself to increase employment access in this sector via enhanced training and education programs. The BC Employer Training Grant is an excellent example of a subsidized program which allows employers to offer training options continuously and strategically for their workforce. The program is designed to support skills training to address provincial labour needs.

- **Empowered by gender equality and social equity:**

  - The agri-foods sector in Squamish offers the opportunity for increased social equity and diversity. At 42 per cent, Squamish over-indexes in female-owned businesses compared to the provincial average of 38 per cent. Of the 90 businesses disclosing their ownership composition, 55 per cent reported that they identified with a minority group. While a benchmark does not exist for Squamish overall, this indicator will be one to monitor overtime. To encourage increased diversity in this sector, a strengthened focus on working with organizations such as WorkBC, WeBC, and the Immigrant Services Society of BC to create and promote opportunities for entrepreneurship and employment among diverse populations will be key.

  - The mismatch of education, training, and skills, relative to available employment in this sector suggests that social inequity exists in this sector for Squamish's workforce. Post-secondary diploma or certificate holders make up 32 per cent of workforce in this sector in Squamish. This group contributes a much larger share of this sector's workforce compared to the Lower Mainland's 13 per cent. Those with less than a high school diploma make up just 4 per cent of the workforce in this sector, compared to 18 per cent in the Lower Mainland. Squamish will need to continue to build employment opportunities and positions in agri-foods and other sectors which better reflect the education of its local workforce to increase equity. It will also be crucial to ensure that workers, who more closely reflect the skills and education profile of available jobs are attracted to and competitive within the local market.

Local – ecological constructs findings from this study highlight several considerations moving forward for the agri-food sector, and include:

- **Managing land conversion and land systems change:**
  - There is a growing prevalence of food and beverage service industry, agri-food manufacturers and food and beverage stores based in Squamish. Between June 2019 and June 2020, and despite the ongoing pandemic, there was a net increase of 15 agri-food businesses. While this result is positive in terms of both, demonstrating greater economic resilience in Squamish when compared to BC overall during this timeframe, and creating new employment opportunities for our local workforce, close monitoring of how the agri-food sector develops in Squamish will be important in managing our finite employment lands and land systems change. Current efforts by the District to project future demand for different forms of employment space, as well as to establish guiding principles for employment space demand need to consider the evolving nature of this sector and in relation to other sectors comprising Squamish's economy.
  - While food and drinking places, food stores, and manufacturing and processing, saw an uptick in the number of businesses within Squamish between June 2019 and June 2020, the number of farms in Squamish and area D dropped by 3 to a total 12 businesses and consistent with the number of farms in 2014. This decrease translates to a 20 per cent drop in farms while BC's saw an overall decrease of 4.1 per cent during the same timeframe. This drop and relatively low number of local farm operations signals the need for ongoing efforts to increase local food systems and encourage local supply chains to serve other industries within Squamish's agri-food sector and more broadly, local sectors comprising Squamish's economy. The Squamish Valley Agricultural Plan (SVAP), with implementation led by the Squamish Food Policy Council and supported by the District of Squamish and SLRD is a guiding document along with the District's Emerging Sector Roadmap and Action Plan which highlights cluster development actions for the agri-food sector. During the development of the SVAP, a significant potential of additional farmable land was determined. It will be important to continue to enhance land access for agriculture initiatives, like land matching programs to increase the number of farms and farmed land in a sustainable
  - Of the 83 businesses which reported that they source products and services locally, 58 per cent indicated that less than 20 per cent of their total supply chain purchases are local. With this in mind, if Squamish wants to encourage broader use of a local supply chain, it will need to consider the future employment space needs to facilitate this. The District undertook a supply chain analysis in 2021 with a focus on emerging sectors of our local economy, including food and beverage processing industries. This analysis concluded that opportunities are linked to refrigerated warehousing and storage, distribution, processing, equipment rental and leasing, and space development which all play an integral part in the local agri-food ecosystem. In addition to identifying land needs, greater training, education, resources and tools, in social procurement practices for local businesses in this industry can help increase the percentage of local purchases.

- **Limit nitrogen and phosphorous loading through sustainable and innovative practices:**
    - With 93 per cent of Squamish agri-food survey respondents indicating they have adopted sustainable practices as part of their business, it's clear that this sector recognizes the importance of mitigating environmentally harmful practices and processes from their business. With waste reduction as the most prevalent measure among respondents, and only 13 per cent indicating they make their own certified organic, fair trade or non-GMO products, there is a clear opportunity to shore up the use of sustainable practices whether in food production or the sourcing of ingredients for manufacturing.
    - Through education, enhancement of current practices and further adoption of circular economy principles we will see businesses reassess their chosen product inputs, re-evaluate their product lifespan, and view waste as a resource. Local, regional and provincial alliances will enhance opportunities to provide far reaching circular practices. Innovation, policy and investment must also support this collaborative approach. The scene is ripe for success, with provincial and federal support for agri-food innovation and circularity, as well as supportive consumer sentiment.

# AGRI-FOOD SECTOR OPPORTUNITIES AND CHALLENGES

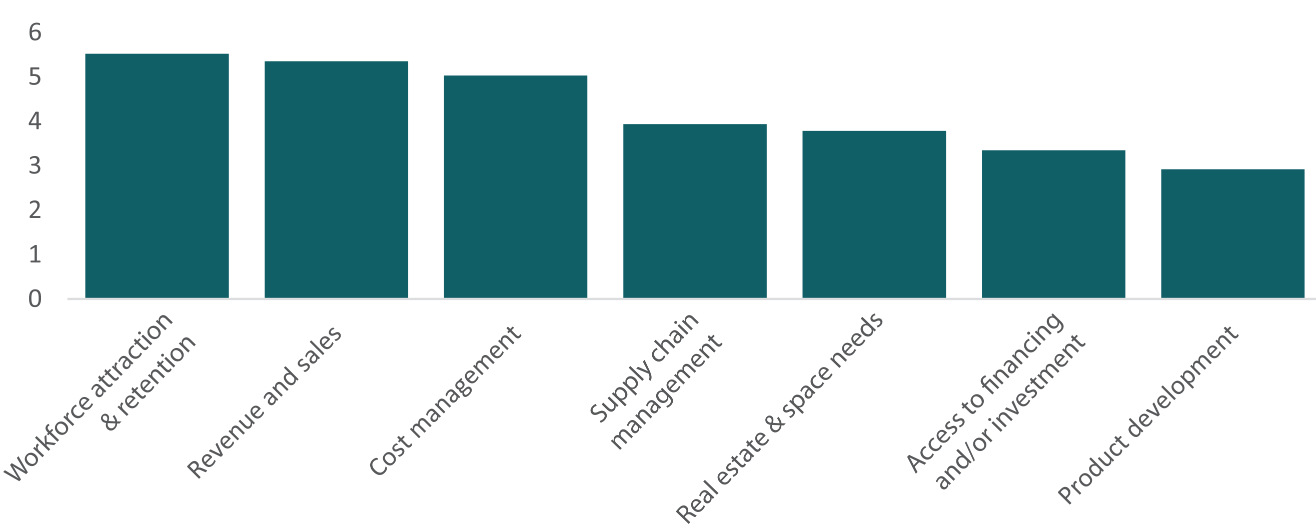
## Sector challenges

**Workforce attraction and retention is the number one challenge facing businesses in the agri-food sector.**

The number one challenge for most businesses during the COVID-19 pandemic has been difficulty in finding staff. According to the Canadian Federation of Agriculture, farmers lost $2.9B in revenues in Canada due to the labour shortage during COVID-19. The Business Development Bank of Canada released a report on labour challenges in Canada in October 2021, which found that 55 per cent of businesses are struggling to find the workers they need.

Rising prices are also increasing the cost of inputs for this sector and forcing owners to increase prices for their products and services. Five years ago, BC's food prices were declining by 0.8 per cent (source: Statistics Canada). In October 2021, they increased by 3.7 per cent[21]. The outlook from "Canada's Food Price report 2022" indicates that prices are expected to rise to the highest level (5 to 7 per cent) in 12 years in 2022[22].

*Figure xxxiii Highest ranking business challenges among Squamish agri-foods businesses*




Source: Squamish Agri-food Survey 2021, n = 66

21 Statistics Canada "Consumer Price Index by product group, monthly, percentage change, not seasonally adjusted, Canada, provinces"
22 Dalhousie University Agrifood Analytics Lab "Canada's Food Price Report 2022"

The pandemic has disrupted supply chains, increased costs and delayed delivery of inputs for Squamish businesses. As long as variants are impacting infection rates, supply chains will be disrupted and delayed.

Businesses in the sector were asked to rank the challenges they face by the following statement:

*Where a ranking of 7 is your most important, and a ranking of 1 is your least important, please rank your business, top challenges and constraints today: Revenue and sales, Cost management, Product development, Workforce attraction and retention, Real estate and space needs, Access to financing and/or investment, Supply chain management.*

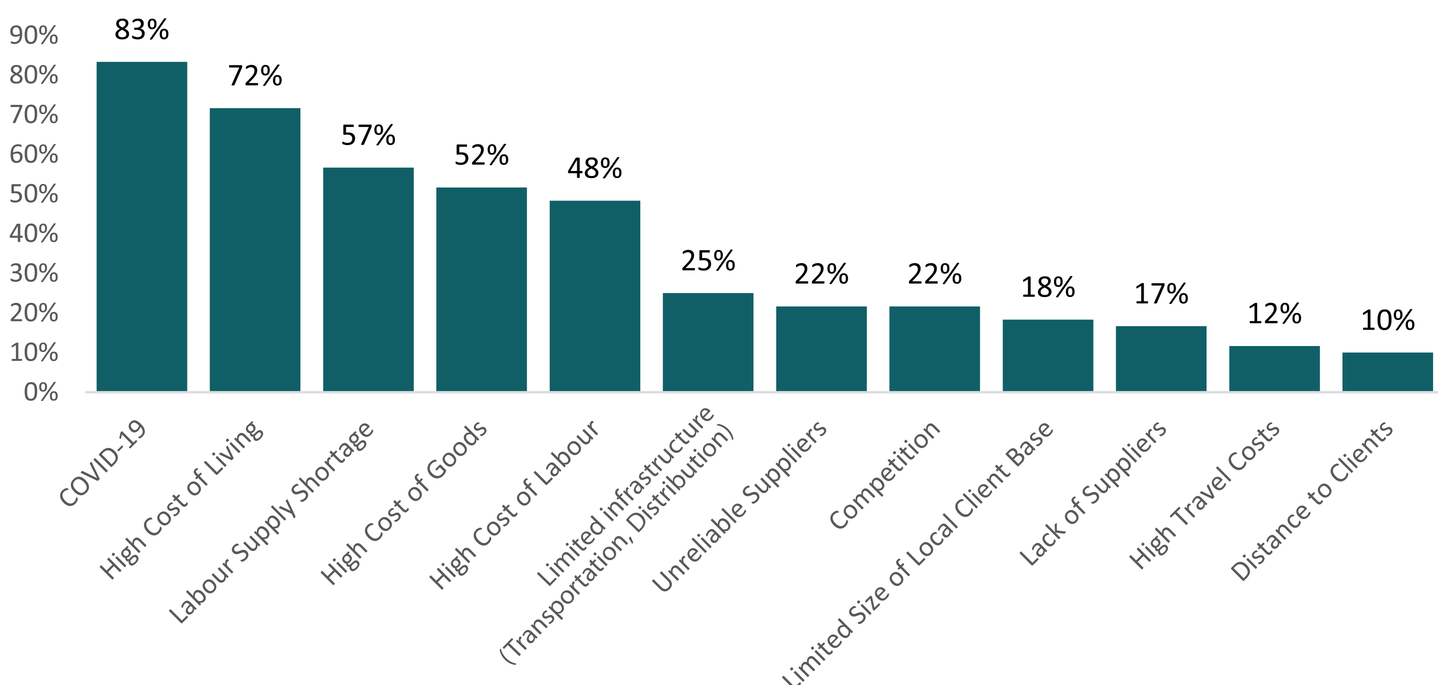
Sixty-six companies responded, ranking the top three challenges as follows:

- Workforce attraction and retention (5.5 out of 7)
- Revenue and sales (5.3 out of 7)
- Cost management (5 out of 7)

**COVID-19 and the high cost of living were cited by Squamish agri-food business owners as the top reasons for current industry challenges.**

Of the 60 Squamish agri-food businesses that answered a question on the reason for these challenges, 83 per cent (50 companies) identified COVID-19, 72 per cent (43 companies) indicated the high cost of living, and 57 per cent (34 companies) reported a shortage in labour supply.

*Figure xxxiv Cited reasons for business challenges among Squamish agri-food businesses*




Source: Squamish Agri-food Survey 2021, n=60

Another top issue cited was the lack of housing for foreign workers and the cost to house these workers, which is a frequently reported issue. During COVID-19, this problem has been compounded due to restrictions on shared living arrangements. The rising cost of living in Squamish means that higher wages are necessary, in addition to all costs increasing for entrepreneurs in this sector.

Business owners also cited the Canadian Emergency Response Benefit (CERB) as a perceived cause for the labour shortage in this sector.

*Figure xxxv Cited reasons for business challenges among Squamish agri-food businesses*

Research undertaken by the District of Squamish Economic Development team in 2021 sought to understand the characteristics that would enable local businesses to effectively scale. The Space Needs for Business report highlights that Light Industrial space, such as would be sought by many local food processors and manufacturers, was predominantly limited by three factors: availability of appropriately large, empty space that is serviced for specialized equipment, flexibility with regard to a space that accommodates several parts of a business, and affordability.

In addition, consideration should be given to the limited land available for primary producers within the boundaries of the District of Squamish – and therefore the reliance on surrounding regions to support the local agri-food supply chain.

# Opportunities for sector growth

The agri-food industry in Squamish faces several long-term challenges that will impact the sector's future.

**While climate change and COVID-19 are the most significant challenges faced by humanity, they also represent an opportunity to shift consumer behaviour to positively impact local agri-food sectors.**

Climate change has prompted consumers to consider plant-based, environmentally sustainable diets and a change in where they source their food. A growing number of consumers consider food choices that mitigate human effects on this planet's ecosystem an important part of their present-day values. In a report from Nielson on plant-based food revenue in Canada, revenue had increased by 25 per cent by the end of 2020 to $600 million. BC has the second-highest positive perception (69 per cent) associated with eating plant-based foods in Canada, while Atlantic Canada has the highest percentage (source: Statista survey 2019).

A second opportunity for growth stems from the disrup tion of supply chains due to COVID-19, forcing local business to look to local sourcing of inputs.

Businesses were asked, "What do you see as future opportunities for growth in your industry?" It was an open-ended question, without prompting or suggestions. Fifty-two companies responded with a range of suggestions from the growth of the District's population to increasing interest in plant-based food products and healthy food products. Some of the market opportunities that these businesses perceive include:


*Figure xxxvi Cited business opportunities among Squamish agri-food businesses*

- "More awareness of what we eat and how it impacts the world."
- "Population increase in both tourism and residents. Squamish is a big part of the growth."
- "Market of value-added beverages is growing — there is a lot of growth — broadening customer base across Canada."
- "Squamish is rapidly growing, so obviously there is lots of room to expand."

Food truck owners were keen on having reserved parking spots for on-street parking, as well as events that celebrate food truck cuisine.

# APPENDIX I

The statistical foundation of this report is based on the Canadian North American Industry Classification System (NAICS) from Statistics Canada. NAICS were selected from the agricultural, processing, wholesale, retail, and food and drinking service sectors. Not all of these activities were present in Squamish, but they are used in comparisons to other regions of the province and BC as a whole.

| NAICS Code | Description |
|---|---|
| | **Agriculture** |
| 111-112 | Farms |
| 1141 | Fishing |
| 1142 | Hunting and trapping |
| 1150 | Support activities for farms |
| | **Food and beverage processing** |
| 3112 | Grain and oilseed milling |
| 3113 | Sugar and confectionery product manufacturing |
| 3114 | Fruit and vegetable preserving and specialty food manufacturing |
| 3115 | Dairy product manufacturing |
| 3116 | Meat product manufacturing |
| 3117 | Seafood product preparation and packaging |
| 3118 | Bakeries and tortilla manufacturing |
| 3119 | Other food manufacturing |
| 3121 | Beverage manufacturing |
| 3122 | Tobacco manufacturing |
| | **Food and beverage wholesale** |
| 4111 | Farm product merchant wholesalers |
| 4131 | Food merchant wholesalers |
| 4132 | Beverage merchant wholesalers |
| 4133 | Cigarette and tobacco product merchant wholesalers |
| 4171 | Farm, lawn and garden machinery and equipment merchant wholesalers |
| 4183 | Agricultural supplies merchant wholesalers |
| | **Food and beverage retail stores** |
| 4451 | Grocery stores |
| 4452 | Specialty food stores |
| 4453 | Beer, wine and liquor stores |
| | **Food and beverage services** |
| 7223 | Special food services |
| 7224 | Drinking places (alcoholic beverages) |
| 7225 | Full-service restaurants and limited-service eating places |

In addition to the NAICS codes listed, specific multipliers for these codes were used to measure the sector's impact on the Squamish and BC economies. In calculating gross domestic product (GDP), Indirect, and induced impacts, regional multipliers from ESMI Analyst and national multipliers from Statistics Canada were used with values such as wages, employment and sales for these effects.

Regional multipliers were used to estimate the impact on the Squamish economy, while national multipliers were used on GDP estimates and the spending of Squamish businesses outside the local area for the rest of BC.

| NAICS | 2019 EMSI Squamish Sub-Sector Economic Multipliers | GDP impact | Indirect Impact | induced Impact |
|---|---|---|---|---|
| 111-112 | farms | 0.442 | 0.0314 | 0.1563 |
| 1150 | Support activities for farms | 0.789 | 0.0024 | 0.2588 |
| 3113 | Sugar and confectionery product manufacturing | 0.314 | 0.0272 | 0.0668 |
| 3118 | Bakeries and tortilla manufacturing | 0.357 | 0.0267 | 0.1198 |
| 3119 | Other food manufacturing | 0.335 | 0.0534 | 0.1178 |
| 3121 | Beverage manufacturing | 0.5 | 0.0063 | 0.0622 |
| 4131 | Food merchant wholesalers | 0.585 | 0.0373 | 0.2466 |
| 4451 | Grocery stores | 0.63 | 0.0087 | 0.2056 |
| 4453 | Beer, wine and liquor stores | 0.63 | 0.0141 | 0.2271 |
| 7223 | Special food services | 0.455 | 0.0119 | 0.1461 |
| 7224 | Drinking places (alcoholic beverages) | 0.455 | 0.0067 | 0.1275 |
| 7225 | Full-service restaurants and limited-service eating places | 0.455 | 0.0094 | 0.1336 |

| NAICS | 2019 EMSI Squamish Sub-Sector Economic Multipliers | Indirect Impact | induced Impact |
|---|---|---|---|
| 111-112 | farms | 0.1411 | 0.6599 |
| 1141 | fishing | | |
| 1150 | Support activities for farms | 0.0026 | 0.2365 |
| 3113 | Sugar and confectionery product manufacturing | 0.0617 | 0.2547 |
| 3118 | Bakeries and tortilla manufacturing | 0.0402 | 0.1820 |
| 3119 | Other food manufacturing | 0.1084 | 0.2487 |
| 3121 | Beverage manufacturing | 0.0133 | 0.1194 |
| 4131 | Food merchant wholesalers | 0.0362 | 0.1937 |
| 4451 | Grocery stores | 0.0054 | 0.1014 |
| 4453 | Beer, wine and liquor stores | 0.0089 | 0.1121 |
| 7223 | Special food services | 0.0098 | 0.1107 |
| 7224 | Drinking places (alcoholic beverages) | 0.0055 | 0.0966 |
| 7225 | Full-service restaurants and limited-service eating places | 0.0077 | 0.1012 |

| NAICS | 2019 EMSI Squamish Sub-Sector Economic Multipliers | Indirect Impact | induced Impact |
|---|---|---|---|
| 111-112 | Farms | 0.0944 | 0.5598 |
| 1150 | Support activities for farms | 0.0017 | 0.1940 |
| 3113 | Sugar and confectionery product manufacturing | 0.0431 | 0.1597 |
| 3118 | Bakeries and tortilla manufacturing | 0.0256 | 0.1328 |
| 3119 | Other food manufacturing | 0.0598 | 0.1674 |
| 3121 | Beverage manufacturing | 0.0116 | 0.1159 |
| 4131 | Food merchant wholesalers | 0.0435 | 0.2836 |
| 4451 | Grocery stores | 0.0030 | 0.0691 |
| 4453 | Beer, wine and liquor stores | 0.0073 | 0.1140 |
| 7223 | Special food services | 0.0053 | 0.0698 |
| 7224 | Drinking places (alcoholic beverages) | 0.0029 | 0.0584 |
| 7225 | Full-service restaurants and limited-service eating places | 0.0041 | 0.0626 |
| 7225 | Full-service restaurants and limited-service eating places | 0.0077 | 0.1012 |

# APPENDIX II

References


2021 Squamish Survey of Agri-food

Axle Business Directory 2021

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Mattison Consulting June 2020 US national poll: "Why people eat plant-based food"

Squamish Valley Agricultural Plan, Market Opportunities Analysis, September 2019

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Study of the British Columbia Agriculture Sector, MNP

# APPENDIX III

## Survey

The following survey was administered to local businesses through a mixed-method, online and telephone study in summer and fall 2021. Initially the survey was available from June to August 2021 through an online format using the District's online survey tool. The survey was promoted widely through the District's marketing channels, as well as through partner communications. To boost response rates, the survey was then used to conduct one-to-one telephone-based in-depth interviews, which were completed August through September. These interviews were conducted by a third-party firm, Lost Cairn Consulting. At study close, 95 respondents participated in the survey to represent a total population of 116 businesses.

## Squamish Craft Food and Beverage Impact Study Questionnaire

Hello and thanks for participating in the Squamish Craft Food and Beverage Economic Impact Survey, an economic development initiative led by the District of Squamish, and in partnership with Tourism Squamish and the Squamish Chamber of Commerce. This survey will be used to better understand the economic, social, and environmental impacts that local craft food and beverage companies contribute to the Squamish community. By participating in this survey, you will be supporting the creation of an economic impact report that will be used to inform future funding, programs, and services for this important sector. We're interested in hearing from the entire sector, from primary agricultural crop producers and fishery producers to food and beverage processors, as well as restaurants, cafes and food and beverage retailers.

The survey will take approximately 10 minutes to complete. Your answers will remain confidential, and all data will be reported at a level that will ensure confidentiality.

In the next section, please tell us about your business. Please note, individual business details will not be listed publicly.

1) Please provide your first name ______________________________________________

2) Please provide your last name: ______________________________________________

3) Please provide your business name______________________________________________

4) Your title / role in the business ______________________________________________

5) How many years has your business been operating (please round to nearest year)? ________________

6) Please select your type of business

( ) Proprietorship (self-owned and operated)

( ) Partnership

( ) Corporation (incorporated)

( ) Co-operative

( ) An association

( ) Not-for-profit

( ) Other - Please Specify: ___________________________________________________

7) Please select which best describes your primary business from the list below. (Your primary business is the one that generates the largest proportion of your revenues.)

( ) Agriculture Production, including all types of farms, hobby farms, and ranches

( ) Fishery (of any size)

( ) Food Production, including companies designing and manufacturing packaged food products for sale at a market, store, or through wholesale/distribution channels

( ) Craft Beverage Production, including manufacturers of both alcoholic and non-alcoholic beverages such as breweries, distilleries, craft kombucha, coffee, and juice producers.

( ) Food Services / Restaurants, including both limited-service eateries, full-service restaurants, and establishments serving liquor.

( ) Food Trucks / mobile food services

( ) Food Product Wholesale, involved in the distribution of groceries and/or food and beverage products.

( ) Food and Beverage Product Retail, including markets, grocery stores, liquor stores, and independent shops selling food products.

( ) Other - Please Specify: ___________________________________________________

8) Is your business owned by someone who identifies as a minority? An owner is anyone who owns at least 50% of the business. Please select one of the following:

( ) No

( ) Yes: Women-owned

( ) Yes: Indigenous-owned

( ) Yes: LGBTQS+-owned

( ) Yes: BIPOC-owned

( ) Other - Please Specify: ____________________________________________

9) Where a ranking of 7 is your most important, and a ranking of 1 is your least important, please rank your business's top challenges and constraints today.

_________Revenue and sales

_________Cost management

_________Product development

_________Workforce attraction and retention

_________Real estate and space needs

_________Access to financing and/or investment

_________Other (please leave comment in next question)

_________Supply chain management

10) Why do you think your business is facing the challenges you just identified? Please select all that apply.

[ ] COVID-19

[ ] High Cost of Living

[ ] Distance to Clients

[ ] Limited Infrastructure (Transportation, Distribution)

[ ] Limited Size of Local Client Base

[ ] High Cost of Goods

[ ] High Cost of Labour

[ ] Lack of Suppliers

[ ] Unreliable Suppliers

[ ] Competition

[ ] Labour Supply Shortage

[ ] High Travel Costs

[ ] Other (Please Specify): ________________________________________________*

The next set of questions will ask you about your workforce. These questions will help us create a profile of the Squamish craft food and beverage labour force.

11) Approximately how many workers did you employ in total, in 2019? Workers can include employed staff on payroll, and also any independent contractors.

12) In your 2019 year of operations, approximately how many workers did your business employ in each of the following categories?

Full-time: ________________________________________________

Part-time: ________________________________________________

Contractor: ________________________________________________

Student: ________________________________________________

Volunteer: ________________________________________________

13) In your best estimation, how do you expect your workforce to change over the next 12 months?

( ) Increase

( ) Decrease

( ) Stay the same

14) In 2019, approximately how many of your workers were in the following age categories?

15-39 years: ____________________________________________

40-64 years: ____________________________________________

65+ years: ____________________________________________

15) Thinking about the educational background of your workforce, approximately what percentage of your staff would fit under each category, in terms of highest level of education attained?

Less than high school diploma: ____________________________________________

High school diploma or equivalent: ____________________________________________

Post-secondary diploma or certificate: ____________________________________________

Post-secondary degree or higher: ____________________________________________

6) Where the number 7 would be your most preferred, and number 1 would be your least preferred, what are your preferred sources of hiring for recruiting new staff?

_________LinkedIn

_________Job posting site/s, such as Indeed, Glassdoor, WorkBC, etc.

_________Facebook job boards

_________Instagram advertisements

_________College/university/trade school work-integrated learning programs, such as Co-op placements, internships, or apprenticeships

_________Word of mouth

In this next section, please provide your comments on any social or environmental initiatives your business engages in.

17) Does your business engage in any environmental sustainability practices? Please select all that apply:

[ ] No, my business does not engage in any environmental sustainability practices at this time

[ ] Local sourcing / procurement initiatives

[ ] Regenerative agriculture

[ ] Waste reduction / diversion from the landfill

[ ] Regenerative energy use (such as wind, solar, rainwater, etc.)

[ ] Environmental impact assessment activities

[ ] Sourcing a majority of products from Organic, Fair Trade, Non-GMO, or other similar certification programs

[ ] Producing products that have a sustainability-oriented certification such as Certified Organic, Fair Trade, Non-GMO, etc.

[ ] Other (Please Specify): ________________________________________________

18) How much of your procurement comes from within the Squamish region, as defined as Britannia to northern Squamish, including Upper Squamish and Paradise Valleys?

( ) 0-20%

( ) 21-40%

( ) 41-60%

( ) 61-80%

( ) 81-100%

19) How much of your procurement comes from within B.C.?

( ) 0-20%

( ) 21-40%

( ) 41-60%

( ) 61-80%

( ) 81-100%

20) Does your business use any of the following regenerative agricultural practices? Please select all that apply:

[ ] Reduction in tillage

[ ] Restoring degraded land

[ ] Improving pasture management

[ ] Reducing fallow periods

[ ] Adding animal manures to the soil

[ ] Crop residue management

[ ] Using legumes and/or grasses in crop rotations

[ ] Converting marginal crop land to perennial grasses or trees

[ ] Using rotational grazing and high-intensity/short duration grazing

[ ] Planting shrubs and trees as shelterbelts

[ ] Restoring wetlands

21) Does your business produce products that are formally certified using any of the following sustainability-oriented food certification programs? Please select all that apply:

[ ] Certified organic

[ ] Fair Trade

[ ] Non-GMO

[ ] Animal Welfare Approved

[ ] Rainforest Alliance

[ ] Grass Fed Certification

[ ] Ocean Wise

[ ] Other (Please Specify): ___________________________________________________*

22) Does your business engage in any social impact activities, or community giving programs? Please select all that apply:

[ ] No, my business does not engage in social impact activities at this time.

[ ] Directing a portion of revenues or profits to charity

[ ] Participating in a formal revenue-based donation program, such as One Percent for the Planet

[ ] Organizing volunteering opportunities and/or fundraising events with local community groups

[ ] Allowing staff to take paid time to volunteer for a local charity or community group

[ ] Participating in a formal social impact program, such as Certified B Corporation

[ ] Placing a focus on hiring marginalized or disadvantaged populations

[ ] Hiring employees and contractors using a Living Wage calculation

[ ] Providing the use of physical space for non-profits / charities at significant discount or free

[ ] Donating products and/or services in-kind to non-profits/charities

[ ] Sponsoring local community events

[ ] Organizing mentorship programs for youth

[ ] Other (Please Specify): ____________________________________________*

23) What do you see as future opportunities for growth in your industry?

____________________________________________________________

24) Would you like to be featured in the upcoming report as an example for how businesses can have a social or environmental impact? If so, please provide your email address so that a member of the Squamish Economic Development team may contact you.

____________________________________________

In the next section we ask about your businesses revenues, expenses, and workers for 2018 and 2019. We are asking about this period in order to avoid the effect that COVID-19 may otherwise present in the data.

Gross Revenue = revenue before any deductions such as business expenses or taxes. This can be found on an income and expense statement for your company's tax return.

Total Expenses = costs associated with the operations of your business, normally including cost of goods sold, labour-related costs, rent, and other miscellaneous expenses. To look up your revenue or expenses from previous years, you can refer to your CRA business tax filings for those years.

25) For the 2018 year, indicate the range your approximate gross revenue falls into in Canadian dollar values (Please write "n/a" if the business didn't exist in 2018.) This information will be used to calculate the economic impact created by the craft food and beverage sector as a whole. Individual business information will not be released at any time.

( ) Below $100,000

( ) $101,000 - $200,000

( ) $201,000 - $300,000

( ) $301,000 - $400,000

( ) $401,000 - $500,000

( ) $501,000 - $600,000

( ) $601,000 - $700,000

( ) $701,000 - $800,000

( ) More than $800,000

26) For the 2018 year, what was your business's total expenses, in Canadian dollar value? (Please write "n/a" if the business didn't exist in 2018.)

________________________________________

27) For the 2019 year, indicate the range your business's approximate gross revenue falls into in Canadian dollar values (Please write "n/a" if the business didn't exist in 2019.)

( ) Below $100,000

( ) $101,000 - $200,000

( ) $201,000 - $300,000

( ) $301,000 - $400,000

( ) $401,000 - $500,000

( ) $501,000 - $600,000

( ) $601,000 - $700,000

( ) $701,000 - $800,000

( ) More than $800,000

28) For the 2019 year, what was your business's total expenses, in Canadian dollar value? (Please write "n/a" if the business didn't exist in 2019.)

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