Township of Spallumcheen

AGRI-HUB FEASIBILITY STUDY

September 27, 2022

PREPARED FOR:

Township of Spallumcheen

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Agriculture and Agri-Food Canada, the Government of British Columbia and the Investment Agriculture Foundation of BC, are pleased to participate in the production of this project. We are committed to working with our industry partners to address issues of importance to the agriculture and agri-food industry in British Columbia. Opinions expressed in this report are those of the authors and not necessary those of the Investment Agriculture Foundation, the Government of British Columbia or Agriculture and Agri-Food Canada.

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IAF Investment Agriculture Foundation

British Columbia

Canada

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NOTES ON STATISTICAL INTERPRETATION

This report presents a number of statistics from the 2021 Census of Population and Census of Agriculture. The following items are important to note:

1. **Rounding** - Totals presented in charts and tables may not sum exactly as figures have been rounded for convenience.
2. **Electoral Area C statistics** - Data for Electoral Area C is not explicitly reported in the Census of Agriculture for numerous data categories. As such, findings for Electoral Area C are not always shown as standalone figures in this report depending on how this data is reported in the Census.
3. **‘X’ Figures** – The Census has suppressed data in some instances that cannot be interpolated and marked them as an “x” which means “too unreliable to be published”. Data has been reported as such in this report where applicable.

EXECUTIVE SUMMARY

The Township of Spallumcheen is a rural agricultural community located in British Columbia's North Okanagan Valley. Spallumcheen has been at the forefront of regional efforts to support existing agricultural operations and attract new ones. Economic Development and Agriculture are top priorities for the Township, further emphasized in the Township's 2020-2022 Community Development Plan (CDP). The Township aims to attract new industrial businesses to the community, particularly to the South Spallumcheen Industrial Area where infrastructure servicing projects are underway. Agri-industry businesses are of particular interest to the Township, as these would further support the agricultural community. Agri-industry typically comprises of businesses that may directly or indirectly benefit agricultural operations, such as abattoirs and slaughterhouses, food processing, animal feed production, and co-operative operations, amongst others.

The Township was awarded grant funding under the Local Government Partnership Program administered by the Investment Agriculture Foundation and funded by Agriculture and Agri-Food Canada and the Province of British Columbia in July 2021 to undertake an agri-industry feasibility study for the community. This study focuses on the existing needs of the larger agricultural community in the North Okanagan and potential opportunities. In particular, the study aims to determine if an agri-hub may be suitable for Spallumcheen.

The goals of the feasibility study are to:

- Identify ways to increase the robustness of the agricultural sector;
- Describe means to diversify the agricultural economic base of the community; and
- Increase the presence of local food products in the community.

Process

The study commenced in September 2021 with a presentation to Council to discuss the project and understand their desired outcomes. A review of relevant local and regional materials was conducted at this time, including local and regional agricultural plans and official community plans, regional growth strategy, and regional employment lands plan. Presentations were made to the Township Agricultural Advisory Committee and Mayor's Farming Roundtable in October to introduce the project and collect regional feedback. Following these discussions, the regional community and agricultural stakeholders across the region and province were invited to participate in an online survey hosted on the Township's website in two rounds: late November to mid-December 2021 and late January to early March 2022. Hard copies were also available at the Township office and a total of 107 responses. During this engagement period, 27 interviews were conducted with agricultural stakeholders to better understand the gaps and opportunities existing in the regional agricultural community. Industry and food hub research was concurrently conducted as well as local and regional agricultural statistics reviewed to better understand the current situation of the agricultural industry in Spallumcheen.

A draft report was prepared and presented to Township Council in May 2022 when the project team was directed to refer the report to stakeholders and present the key findings to the Township and Regional Agricultural Advisory Committees. Comments were received from the Agricultural Land Commission (ALC) and the Regional District of North Okanagan (RDNO) that were addressed in the final document presented to Township Council in August 2022.

Key Findings

The key findings of this study pertaining to the feasibility of agri-industry in Spallumcheen are as follows:

- **Widespread industry needs** - Regionally, the agricultural industry is constrained by a lack of adequate processing facilities (e.g., dairy, abattoirs, produce), product development, supply aggregation, cold storage, and warehousing.
- **Spurring economic development interest** - A distinct gap exists amongst the agricultural community in understanding what the perceived opportunities are, how private investment occurs, and what needs to be done to successfully motivate and spur private sector investment. In addition, regional policy direction specific to agricultural investment is lacking, however the Regional District of North Okanagan has identified development of a reginal economic strategy for agricultural as a near-term priority.
- **Agri-processing in the ALR** – Agri-industry proposals for lands in the ALR may conflict with the ALC's mandate to preserve agricultural land and encourage farming of these lands due to the industrial nature of these operations. As such, ALC approval is required to permit agri-industry uses in the ALR.
- **Land availability -** A lack of serviced industrial land continues to limit the area's ability to expand and/or attract transportation and warehousing operations that would support trade and exporting opportunities.

Recommendations

The report recommends two approaches for consideration to further support agri-industry development in Spallumcheen. These may be combined or standalone initiatives:

1. **Create an Agri-Food Hub or Agri-Service Centre**

   Assess the scope and mandate for a fully functioning regional processing or service hub in Spallumcheen. A private-public model is most likely. The land can be leased (for at least 20 years) by local growers and will require water, electricity, and suitable agronomic conditions. The hub could help accelerate industry growth and create new allied opportunities. The report details a number of next steps for consideration in development of an agri-food hub or agri-service centre.

2. **Offer agricultural land to primary growers**

   Rent, lease, or sell Township-owned agricultural land to produce crops, vegetables, orchards, or new crops. The most viable crop enterprise is unknown; however, cherry orchards, wineries, and greenhouse operations may all be commercial-scale enterprises. Sourcing farmers and potential new crop varieties may be best explored with local community groups such as Young Agrarians.

Conclusion

The report concludes that further development of agri-industry in the community is likely viable, such as establishment of an agri-food hub or an agri-service centre; however, the overall feasibility of such a facility requires further assessment before a definitive answer can be stated.

1.0 INTRODUCTION

The Township of Spallumcheen received funding from Agriculture and Agri-Food Canada and the Government of British Columbia via the Investment Agriculture Foundation's Local Government Partnership Program to undertake an Agri-Hub feasibility study for the South Spallumcheen Industrial Area.

The purpose of the study is to determine what agri-industry hub / agri-hub uses may be suitable for the area to further support the farming community and existing agri-industry businesses through the production, sale or supply of agricultural products and/or services.

It is anticipated that the findings of the study will inform the creation of an agri-industry plan for the area within the coming years (potentially in 2023). The scope of the review involved interviews, document and statistical reviews, and providing an assessment based on the consultants' experience.

Some context is useful. It is important to note some recent events which were very disruptive to the agricultural industry and to Canada.

- First, the COVID-19 pandemic started in March 2020 and caused major economic declines as industries had to close for a period of time and GDPs decreased by about 8%. COVID-19 and its variants are still a risk to economic growth and to human health as a global health issue.
- Second, a major flood occurred in south-central BC in 2021 and caused very high economic losses and disruptions to supply chains, logistics, transportation, and many agricultural industries. This climate issue remains as a risk, as do annual forest fires and heat domes.
- Third, sustained periods of below-normal interest rates have caused new inflation growth and high debt levels in the economy. These prime rates are now being increased to a more normal target rate.
- Fourth, the war in 2022 Ukraine has caused an oil supply shortfall and is combined with a period of disinvestment in oil production and drilling. This shortfall is now causing a price rise and another shock to global economic supply chains.

These factors are causing a re-examination of ways to shorten the supply chain, which may entail sourcing and producing an increased supply of local foods. A better understanding of the need for reducing external shocks with technology, new business models, and more collaborations would also be beneficial as the agricultural industry is feeling many of these effects.

1.1 Background

The Township of Spallumcheen (the Township) is a rural agricultural community located in British Columbia's North Okanagan Valley. The Township has been at the forefront of regional efforts to support existing agricultural operations and industries as well as attract new ones. The Township's slogan, "*Where Farming and Industry Proper*" recognizes the synergies that exist between agriculture and industry. The priorities outlined in the Township's 2020 – 2022 Community Development Plan (CDP) align with this slogan which aims to promote industrial activity that will benefit the farming community and vice versa. Economic Development and Agriculture are both identified as medium-term priorities in the CDP, that in summary, aim to attract new industrial businesses, particularly to the South Spallumcheen Industrial Area where community infrastructure servicing projects are underway, and support agriculture by promoting direct and indirect businesses.

The study area focuses on one parcel situated along Highway 97A, as shown in Figures 1, 2, and 3. This area was selected as the potential location for a future agricultural industry hub due to its proximity to Highway 97A (a major transportation route connecting the United States to the North Okanagan and beyond), the railway, existing active agricultural lands, and existing industrial businesses in the industrial park located to the immediate south of the study area.

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U:\Projects_KEL\1369\0091\01\D-Design\GIS\Projects\Pro_Projects\Pro_Projects.aprx\Figure XX SE Sector Agri-Industry Plan Area - Study Area

SPALLUMCHEEN TOWNSHIP
Incorporated 1892

Agri-Hub Plan Area

Study Area

Legend

Study Area

Notes:

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.

0 100 200 300
Meters

Coordinate System:
Name: NAD 1983 UTM Zone 11N

Scale:
1:9,000
(When plotted at 8.5"x11")

Data Sources:
- Data BC

Project #:	1369.0091.01
Author:	RB
Checked:	BT
Status:	Final
Revision:	A
Date:	2022 / 2 / 11

URBAN systems

The study area is approximately 42 ha in size. The lands are in the BC Agricultural Land Reserve (ALR) and requires Agricultural Land Commission approval to be used for non-agricultural purposes. In 2018, the Township attempted to exclude land in the South Spallumcheen Industrial Area from the ALR for agri-industrial purposes; however, the application was unsuccessful at that time.

Figure 2: 4305 L & A Cross Road (Subject Site) – Northeast

Figure 3: 4305 L & A Cross Road (Subject Site) - North

In June 2020, the Township purchased the property and in August 2021, redesignated lands in this area from "Agricultural" to "Industrial" in the Official Community Plan (OCP).[1] Zoning of the lands remained as Agricultural. In 2021, a non-farm use application was submitted to the ALC by Okanagan Valley Feeds for a feed mill operation on a 2.5 ha parcel (see Figure 4). The application was successful and approved by the ALC. The feed mill will address a need for manufactured feed in the Okanagan. The rationale for the location of the feed mill in the ALR was directly related to the absence of suitable industrial land in Spallumcheen.

[1] Bylaw No.1940

Figure 4: Okanagan Valley Feeds site

1.2 Project Focus

The Agri-Hub Feasibility Study aims to support the agricultural sector of the North Okanagan by providing a venue for agri-industrial expansion to take place. Based on a longer-term plan to support agriculture in the study area, the explicit goals of the feasibility study include the following:

- Identify ways to increase the robustness of the agricultural sector;
- Describe means to diversify the agricultural economic base of the community; and
- Increase the presence of local food products in the community.

The investigation includes review of the following:

- Community survey to determine agricultural and agri-industry needs in the area;
- Agricultural area plans of various communities within the Regional District of North Okanagan (RDNO);
- RDNO Regional Growth Strategy;
- RDNO Agricultural Market Opportunities Assessment;
- RDNO Employment Lands Report;
- OCPs of various Electoral Areas and municipalities in the RDNO;
- Similar agri-hub experiences and initiatives in other jurisdictions; and
- Interviews and questionnaires of local agri-business stakeholders.

The key questions to address in this study include:

- What is the current local situation?
- What are the needs for agricultural business retention, expansion, and attraction?
- What are the new industry activities that would support Spallumcheen's local economy?
- What initiatives would complement agricultural operations throughout the RDNO?
- In the long-term, what is the best solution for enhancing growth in this core agri-food industry in the BC Interior?

1.3 Census Overview

In 2021 (the last Census period), there were 91,610 persons in the RDNO or the NOCD[2]. Vernon is the regional hub with about 49% of the regional population, followed by Coldstream with 12%, and Spallumcheen with 6% (see Figure 5). The Township's population was 5,307. Spallumcheen has the largest land area of all municipalities in the RDNO (25,577 ha / 63,202 ac) and 55% of its land base is classified as being farmed, according to the 2021 Census of Agriculture, and as shown in Figure 6. A full breakdown of these statistics for each North Okanagan community is included in Tables 1 and 2 of **Appendix A**.

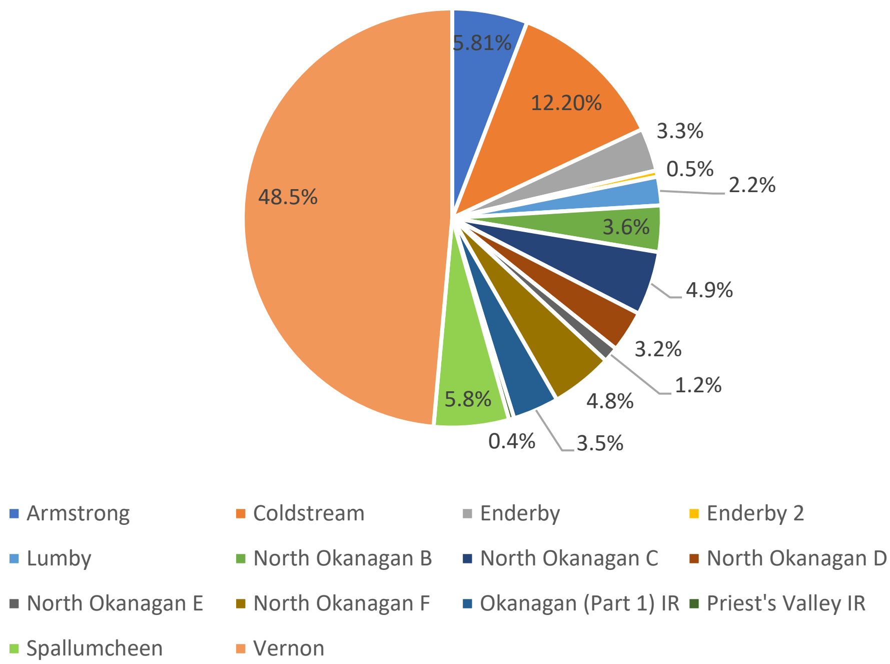

Figure 5. Population of the North Okanagan Regional District by Electoral Area (Statistics Canada Census of Population, 2021).

2.0 FARM CHARACTERISTICS

2.1 Farm Type

According to the 2021 Agriculture Census, farm characteristics by number of farms carrying out indicated agricultural activities in the RDNO are as follows[3]:

- All types of animal production predominate (48.1%)
- Hay farming is a primary farming activity (22.9%)

[2] The North Okanagan Census Division (NOCD) comprises the same area as the Regional District of North Okanagan (RDNO). To enhance understanding for the reader, statistics collected for the NOCD will be referred to as the RDNO throughout this report.
[3] Under the North American Industry Classification System (NAICS), farm type is determined by predominant type of production. This determined by estimating the potential receipts from the inventories of crops and livestock reported on the Census of Agriculture and determining the product or group of products that makes up the majority of the estimated receipts.

- 17.9% of operators engage in fruits and/or vegetable farming
- Farm types are wide ranging.

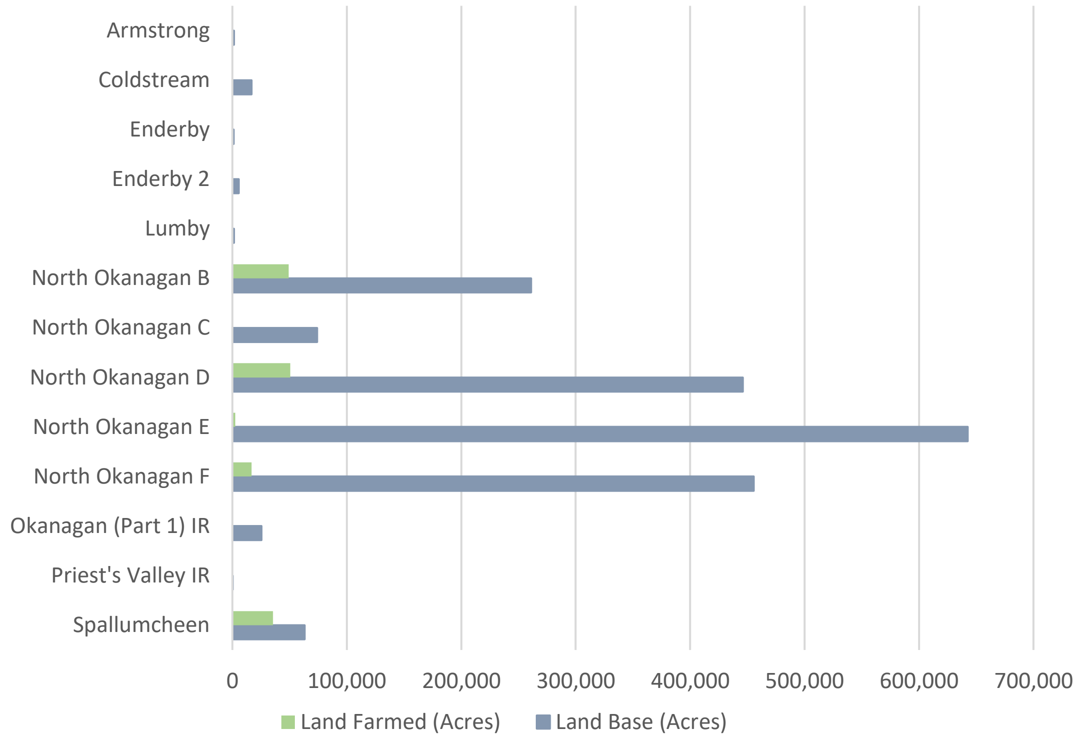

Figure 6. Land Farmed vs. Land Base Comparison for North Okanagan Communities (Statistics Canada Census of Agriculture, 2021 and Agricultural Land Use Inventory Report for the North Okanagan, 2016).

The following trends were prevalent between 2011 and 2021 (in categories with more than 10 operators):

- Farming operations decreased in number by 16.7% between 2011 and 2021
- Increasing numbers of farm types include miscellaneous crop farming (+63.6%); apiculture (+46.7%); poultry and egg production (+33.3%); vegetable and melon farming (+31.4%); and oilseed and grain farming (+29.2%)
- Decreasing number of farm types include other animal production (-50.2%); greenhouse, nursery, and floriculture production (-27.5%); hay farming (-26.6%); and beef cattle ranching (-14.1%).

A full breakdown of these statistics is included in Table 3 of **Appendix A**. Key takeaways from the farm type data for the North Okanagan are:

- Beef ranching and hay farm types are decreasing
- Poultry operations are increasing
- A change in farm types is occurring toward non-livestock operations.

Figure 7 compares this information on farm types for the North Okanagan overall to Spallumcheen for the years 2016 and 2021.

In the Township of Spallumcheen, farm characteristics are as follows:

- Animal production activities are wide ranging
- Hay farming is a primary farming activity (22.1%), similar to RDNO
- 14.2% of operations identify as vegetable, fruit, greenhouse, nursery, or flower farms
- 11% of operators engage in fruit and/or vegetable farming
- A 48.6% increase in number of poultry operations occurred between 2011 and 2021
- Farm types are wide ranging.

The following trends were prevalent in Spallumcheen between 2011 and 2021 (in categories with more than 10 operators):

- There was a drop (4.3%) in the number of farm operations between 2011 and 2021
- Increasing farm types by number include fruit and tree nut farming (+54.5%); vegetable and melon farming (+52.9%); poultry and egg production (+48.6%); and oilseed and grain farming (+38.5%)
- Decreasing farm types by number include other animal production (-43.9%); sheep and goat farming (-37.5%); beef cattle ranching (-14.6%); and hay farming (-8.2%).

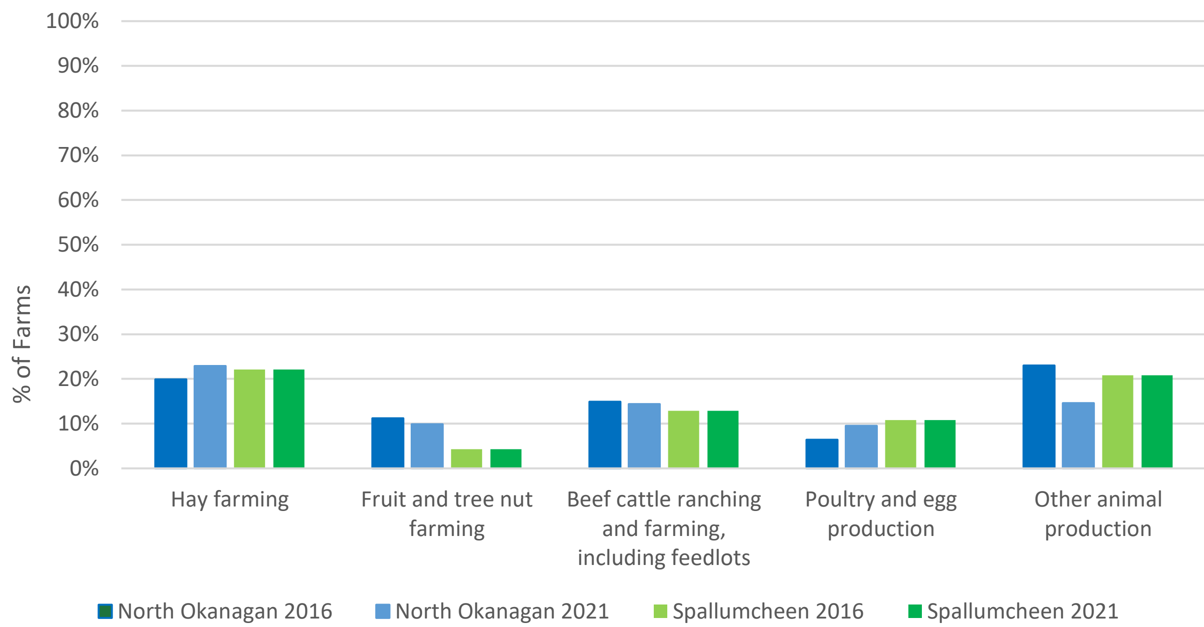

Figure 7. Farm Characteristics of the RDNO and Spallumcheen (Statistics Canada Census of Agriculture, 2021).

A full breakdown of these statistics is included in Table 4 of **Appendix A**. Key takeaways from the farm type data for Spallumcheen are as follows:

- More farm types are increasing in number than there are farm types decreasing, and some of these increases are in non-traditional operations
- Spallumcheen agriculture is increasing its predominance in the North Okanagan region.

2.2 Farm Types by Number

Table 1 compares the farm classifications in the RDNO to Spallumcheen for the year 2021. This data includes counts for the number of farms included in the RDNO and Spallumcheen, it does not take into account the number of animals, crops, and items produced on such farms. While Spallumcheen represents about 23% of the farmed land area in the RDNO, certain farm types are more heavily represented in Spallumcheen than in the region as a whole (e.g., greater than 23% of the farms in the region). These include dairy, poultry and eggs, apiculture, grain farming, vegetables, and hay production. The blue-shaded cells indicate those sectors that are predominantly in Spallumcheen.

Table 1: Comparison of North Okanagan and Spallumcheen Farm Type Classifications (Statistics Canada Census of Agriculture, 2021)

Farm Type Classification North American Industry Classification System (NAICS)[4]	RDNO	Spallumcheen	Spall as % of RDNO
Beef cattle ranching and farming, including feedlots [112110]	140	35	25.0%
Dairy cattle and milk production [112120]	53	21	39.6%
Hog and pig farming [1122]	2	0	0.0%
Poultry and egg production [1123]	92	55	59.8%
Sheep and goat farming [1124]	38	10	26.3%
Other animal production [1129]	142	46	32.4%
Apiculture [112910]	22	9	40.9%
Oilseed and grain farming [1111]	31	18	58.1%
Vegetable and melon farming [1112]	67	26	38.8%
Fruit and tree nut farming [1113]	96	17	17.7%
Greenhouse, nursery and floriculture production [1114]	37	12	32.4%
Hay farming [111940]	223	101	45.3%
Fruit and vegetable combination farming [111993]	11	3	27.3%
All other miscellaneous crop farming [111999]	18	4	22.2%
Total number of farms	972	357	36.7%

While North Okanagan farm numbers have dropped overall, Spallumcheen is increasing its role as a hub for animal production, poultry meat production, and related horticultural practices such as hay and grain production. At the same time, Spallumcheen is diversifying into vegetable and fruits. Table 2 summarizes the main points of contrast between RDNO and Spallumcheen farm types.

Table 2: Differences in Farm Types between RDNO and Spallumcheen

RDNO	Township of Spallumcheen
• The largest number of farms fall into the “hay farming” category (22.9%) • The 2nd largest number of farms fall into the “other animal production” category (14.6%) which includes apiculture, horses, rabbits and other animals, not including cattle, pigs, poultry, sheep and goats and aquaculture[5]	• The largest number of farms fall into the “hay farming” category (28.3%). • The 2nd largest number of farms fall into the “poultry and eggs production” category (15.4%) • The 3rd largest number of farms fall into the “other animal production” category (12.9%) which includes apiculture, horses, rabbits and

[4] NAICS is a classification of business establishments by type of economic activity (process of production) used by government and business in Canada, Mexico, and the US. Classification codes have been included for ease of reference.
[5] NAICS Code Description. https://www.naics.com/naics-code-description/. Apiculture is in the classification but shown separately in Table 1, above.

• The 3rd largest number farms fall into the "beef cattle" category (14.4%)
• The 4th largest number of farms fall into the "fruit and tree nut farming" category (9.9%)
	other animals, not including cattle, pigs, poultry, sheep and goats and aquaculture
	• The 4th largest number of farms fall into the "beef cattle" category (9.8%)
	• While Spallumcheen farms represent 36.7% of the farms in RDNO, the Township contains a predominant share of:
	  • poultry and egg production (59.8%);
	  • oilseed and grain farming (58.1%);
	  • hay farming (45.3%);
	  • apiculture (40.9%);
	  • dairy cattle (39.6%); and
	  • vegetable and melon farming (38.8%)

2.3 Farm Size

According to the 2021 Census of Agriculture, there were 972 farming operations in RDNO and 357 in Spallumcheen. Figure 8 compares the size of farms in Spallumcheen to RDNO e. Most farms in both jurisdictions are less than 70 acres in size. 30% of farming operations in RDNO are less than 10 acres in size, while this is the case for 27.7% of farming operations in the Township. On the opposite spectrum, 2.6% of RDNO farming operations are greater than 760 acres in size, while this is the case for 2.2% of operations in Spallumcheen.

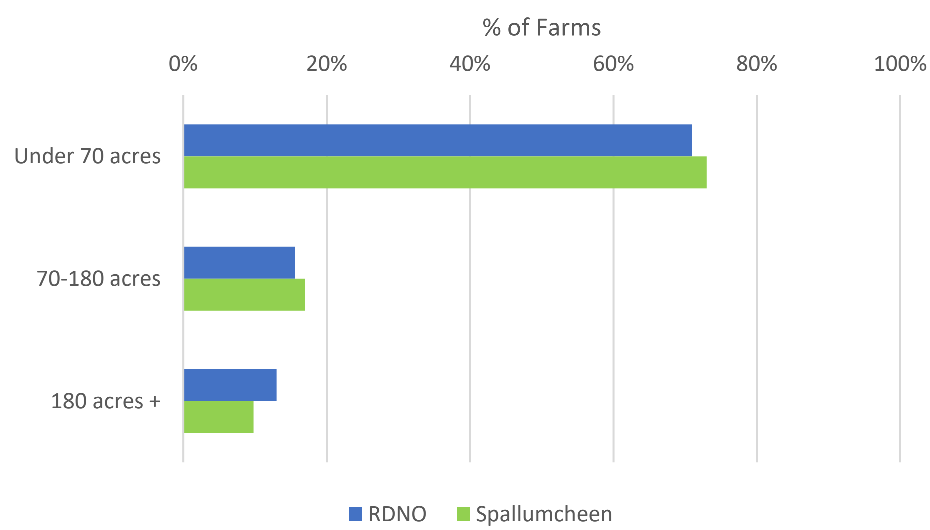

Figure 8. Distribution of Farms by Size in RDNO and Spallumcheen (Statistics Canada Census of Agriculture, 2021).

3.0 AGRICULTURAL PRODUCTION CHARACTERISTICS

3.1 Primary Land Use Statistics

Provincial Context

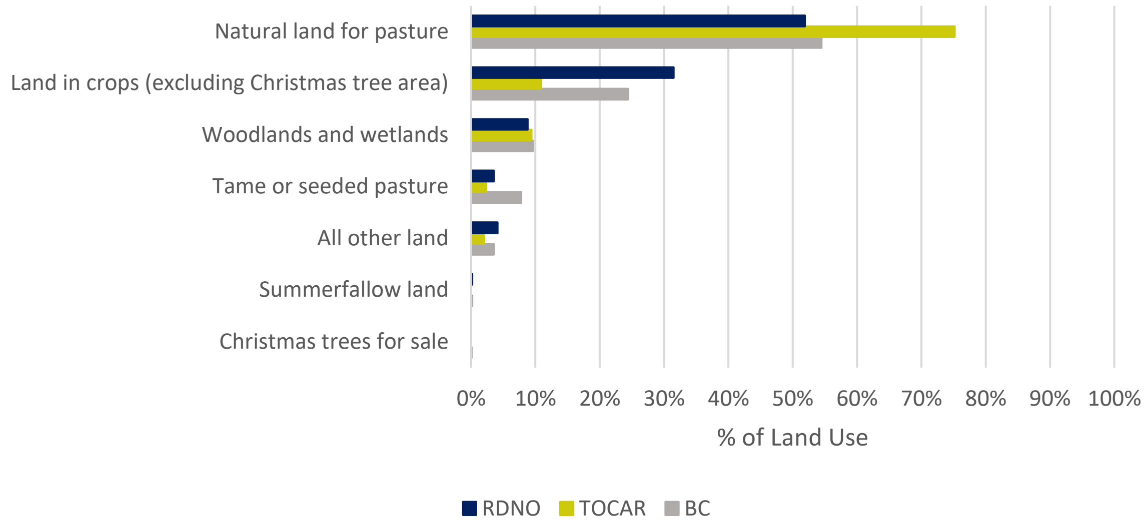

Figure 9. Comparison of Agricultural Land Use in the Thompson-Okanagan Census Agricultural Region (TOCAR) and RDNO to the Province (Statistics Canada Census of Agriculture, 2021).

When considering the statistics discussed in this section, it is important to recognize that agricultural land is typically located in some of the most habitable areas of British Columbia due to topographic purposes (e.g. valley bottoms) and access to water, particularly rivers and lakes. Competition for land use in these areas is therefore high, and communities are faced with the overall economic and land use planning challenges of determining how to best accommodate and balance both population and economic industry growth which includes agriculture. While the need for agriculturally productive land increases as the population grows and demand for food in turn increases, agriculture is often not the most viable land use in terms of clear value provided to the population. For example, community amenities such as recreation centres have a clear public benefit with an immediate output, but this is less easy to see with agriculture which provides benefit to the greater population through food production and a less immediate output due to the time it takes for food to leave the farm and reach the table. These statistics provide regional context on the agricultural situation of the North Okanagan but do not directly highlight the competition for other uses. As such, it is challenging to make a solid case for agri-industry promotion in Spallumcheen based on these numbers alone.

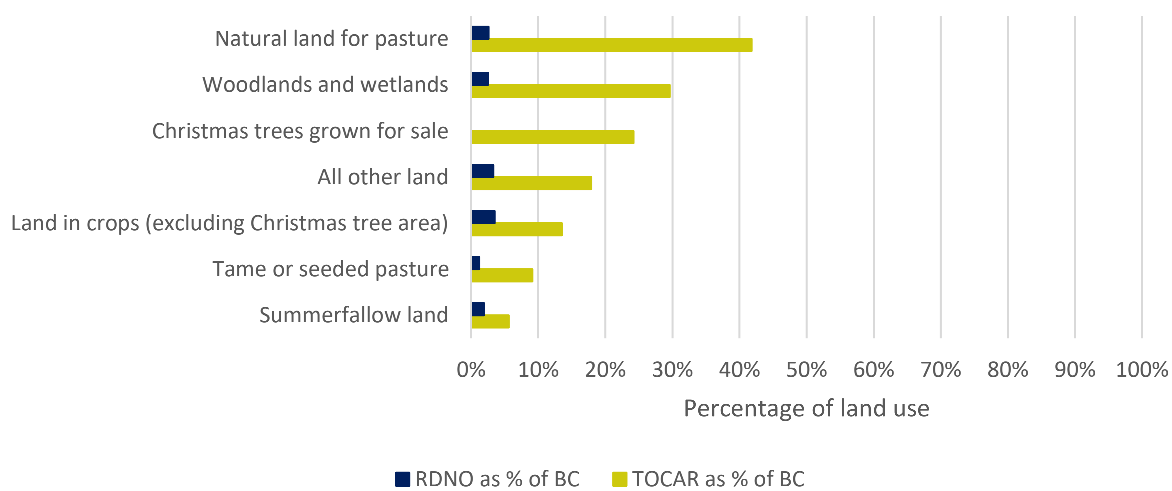

Figure 10. Distribution of Agricultural Land Uses within BC (Statistics Canada Census of Agriculture, 2021).

MAP 2C

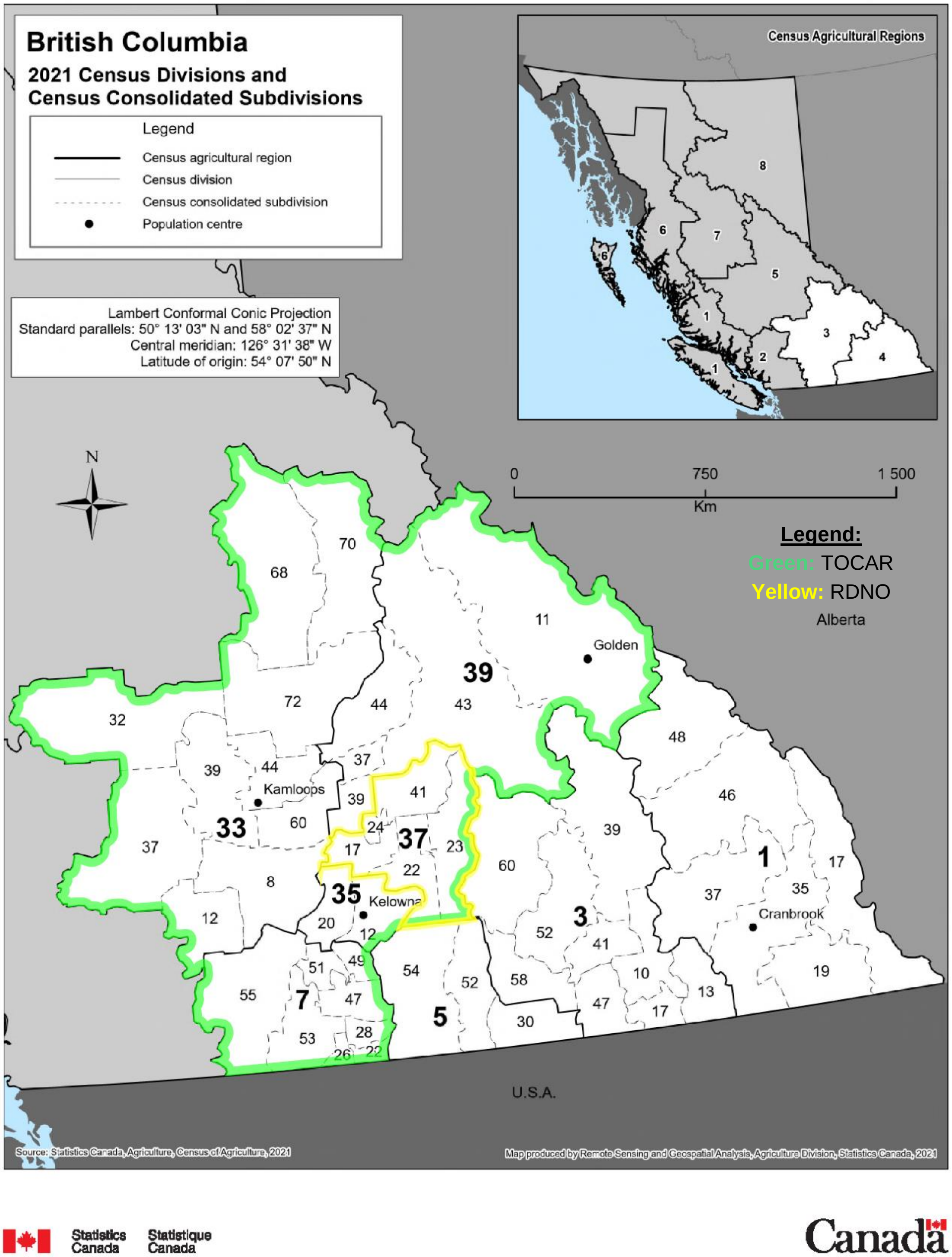

Figure 11. TOCAR and RDNO Areas (Statistics Canada, 2021)

Based on the 2021 Agricultural Census, there is about 5.65 million hectares of land engaged in farming and ranching activities in BC. The Thompson-Okanagan Census Agricultural Region (TOCAR), containing the North Okanagan Census Division (RDNO), represents 30.3% of the provincial total, or about 687,966 hectares / 1.7 million acres (see Figure 11) The RDNO contains 2.7% of the provincial agricultural land base, as shown in Figure 9. A full breakdown of the total amount of land in British Columbia allocated to each type of agricultural land use is included as Table 5 in **Appendix A.**

Figure 9 shows that the predominant agricultural land use in BC is natural land for pasture (54.5%) followed by land in crops (24.4%). In comparison, TOCAR is characterized by an even higher proportion of natural land for pasture, corresponding to the predominance of ranching in the region. In contrast, the RDNO, while having a high proportion of natural land used for pasture, also has a level of cropping activity (31.5%) exceeding BC as a whole. This observation highlights the diversity of the RDNO and its importance to BC agriculture.

Figure 12 shows changes in land uses in RDNO between 2011 and 2021, with the Spallumcheen equivalent for this time period shown in Figure 13. Most noticeably, the area of land utilized by agriculture shrank by 26% (see Table 6 in **Appendix A**), likely as a result of the wildfires and abnormal weather that has affected the region in the last few years. Areas of all land uses have decreased in the 2011 to 2021 period, with land in crops experiencing the smallest decline. Clearly, cropland appears more resilient to climate change if factors of production can be sustained.[6] Drought also may have contributed to decisions not to crop in 2021 Census year.

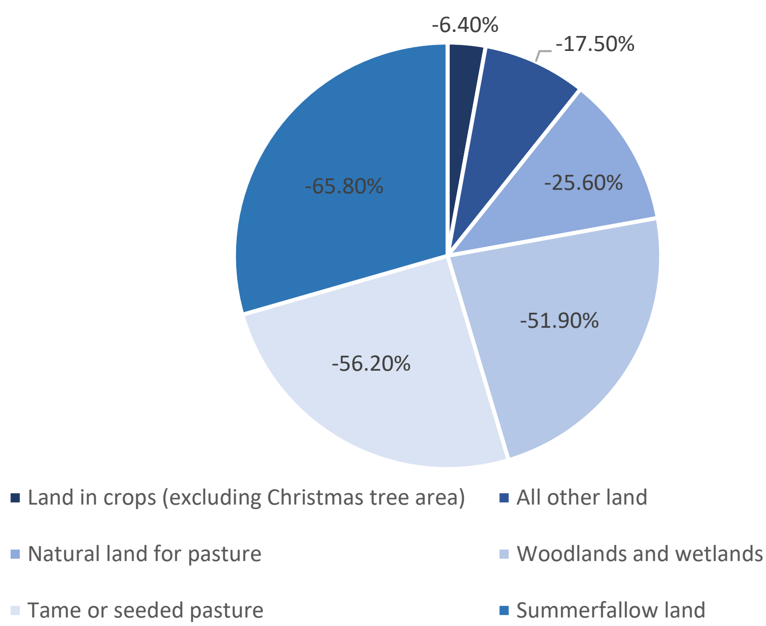

Figure 12. RDNO Changes in Land Uses and Agricultural Area, 2011 to 2021 (Statistics Canada).

North Okanagan Census Division

The boundaries of the North Okanagan Census Division coincide with the Regional District of North Okanagan, and as such, this area is referred to as the RDNO throughout the report. The region consists of 750,000 ha (1,853,515 ac), of which about 65,000 ha (160,550 ac) is in the Agricultural Land Reserve (ALR). This area constitutes 8.7% of the total land base.[7]

[6] The factors of production are resources, labour, capital and entrepreneurship.
[7] RDNO Regional Agricultural Plan. 2015. https://www.rdno.ca/sites/default/files/2021-06/150915_RAP_Final.pdf

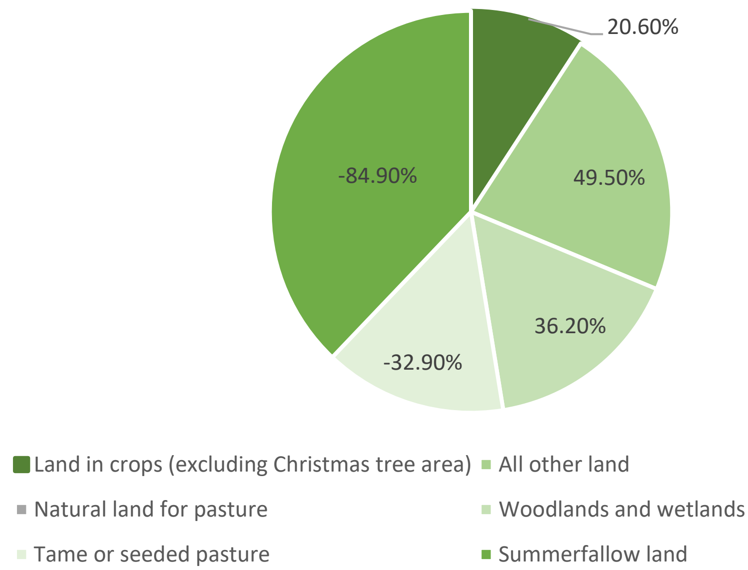

Figure 13. Spallumcheen Changes in Land Uses and Agricultural Area, 2011 to 2021 (Statistics Canada).

Agricultural land use in the RDNO in 2021, captured by the Canada Census of Agriculture, consisted of agricultural activity on 154,234 acres, suggesting that the agricultural land base was about 96% of the area in the ALR. The largest agricultural land use category is natural pasture (51.9%) (see Figure 14). Crop land constitutes 48,596 acres, or 31.5% of the agricultural land use, while tame and seeded pasture accounts for 3.5% of the agricultural land use. Further details of these statistics are provided in Tables 7 and 8 of **Appendix A**.

Township of Spallumcheen

There are 37,499 acres of Township lands located in the Agricultural Land Reserve, accounting for 23.3% of RDNO land in the ALR. The 2021 Census of Agriculture indicates that Spallumcheen agricultural activity utilized 35,480 acres, representing 23% of the RDNO agricultural land base (Figure 14), with 64% of agricultural land in Spallumcheen used for growing crops (Figure 14). Further details of these statistics are provided in Tables 7 and 8 of **Appendix A**.

Agri-Tourism

It is important to note that there currently is no database for agri-tourism operations in the RDNO; however, agri-tourism does play a significant role in positively contributing to the region's agricultural economy. In addition to wineries, other operations provide farm-direct experiences, including, but not limited to:

- Utopia Feels Botanical Glampground, Coldstream
- Historic O'Keefe Ranch, Spallumcheen
- Log Barn 1912, Spallumcheen
- Davison Orchards Country Village, Vernon
- Farmer John's Market, Electoral Area

3.2 Primary Crop Land Use Characteristics

RDNO

In RDNO , crop land accounts for 48,596 acres of Census farms (see Table 7 of **Appendix A**). Alfalfa mixtures and tame hay dominate in all Census consolidated subdivisions (CCS) in the RDNO, comprising the use of 67.5% of all

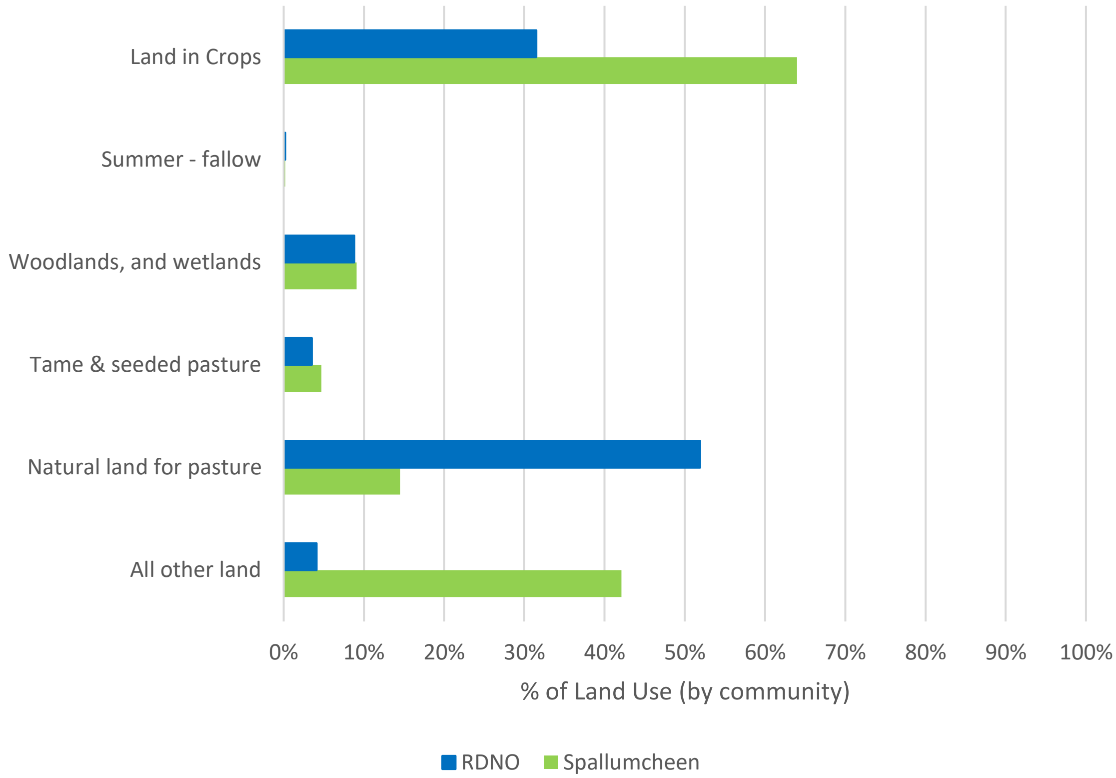

Figure 14. North Okanagan and Spallumcheen by Agricultural Land Use (Statistics Canada Census of Agriculture, 2021).

crop land (Figure 15). Corn for silage/grain (15.8%), and cereal crops (12%) are the next largest crop categories. The largest portion of the land base in the RDNO (94.4%) is farmed to support livestock and equine operations in the form of forage production, seeded pasture, and field crops (predominantly cereal crops for feed). Fruits and vegetables are grown on only 2.4% of the crop land base. In 2021, the RDNO had 339,439 square feet (7.8 acres) of greenhouse area used for vegetables, flowers, and the production of other products. A historical comparison of how these statistics have changed since 2011 is provided in Table 9 of **Appendix A.**

Further information on the proportion of crop types in each CCS of the North Okanagan is outlined in Tables 10 and 11 of **Appendix A**. Some statistics provided in these tables are suppressed for confidentiality reasons. It should be noted that Spallumcheen dominates all crop categories in the RDNO.

Township of Spallumcheen

In 2021, for Spallumcheen, crop lands account for 22,696 acres of Census farms. Alfalfa/tame hay, corn – silage/grain, and field crops represent 96.8% of the total area of crops (see Figure 16). Fruits, vegetables, and not specified operations combined represent 3.2% of the crop land base, or approximately 725 acres, overall. In 2016, Spallumcheen had 31,880 square feet of greenhouse area (0.73 ac) used for vegetables, flowers, and the production of other greenhouse products. In 2021, greenhouse area was not reported due to confidentiality considerations.

Key Land Use Characteristics

Considering the land uses noted in section 3.1 and cropping patterns, the following characteristics outlined in Table 3 are evident for RDNO and Spallumcheen. Unless otherwise noted, all statistics reported are from 2021.

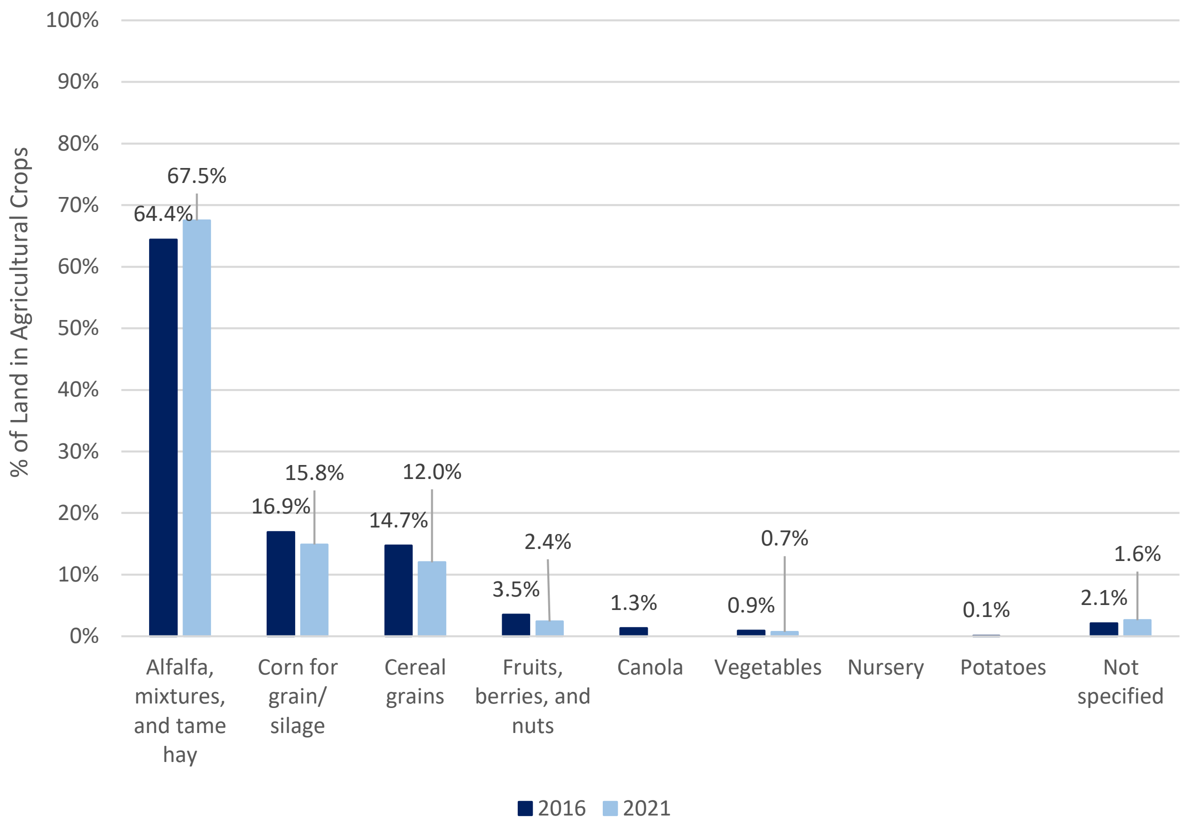

Figure 15. Land in Agricultural Crops, RDNO (Statistics Canada Census of Agriculture, 2016 and 2021).

Table 3: Land Use Characteristics Comparison

RDNO	Township of Spallumcheen
• The area of Census farms declined 26% between 2011 and 2021 • 51.9% of the total land base was in natural land for pasture, down from in 61.7% in 2016 • 3.5% is in tame/seeded pasture • 31% of the land base is used for growing crops. 94.4% of these crops are grown to support the livestock sector.[8] ◦ 30% of the agricultural land base is used for growing crops such as alfalfa, alfalfa & grass mixtures, grass for hay, corn for silage, and cereal grains	• 28.7% of the total agricultural land base was in natural land for pasture in 2016. • 4.7% is in tame/seeded pasture • 64% of the Spallumcheen agricultural land base is used for growing crops • 96.8% of crops grown are in support of the livestock sector such as alfalfa, alfalfa & grass mixtures, grass for hay, corn for silage, and cereal grains

[8] Except for a small acreages planted to ancient grains, and canola.

Further investigation of the “other and unspecified” categories of crops indicates a wide diversity of small-scale operations for organic fruits and vegetables and flower farms (11 in total), including the relocation of the Bloom Tulip Farm from Abbotsford.[9]

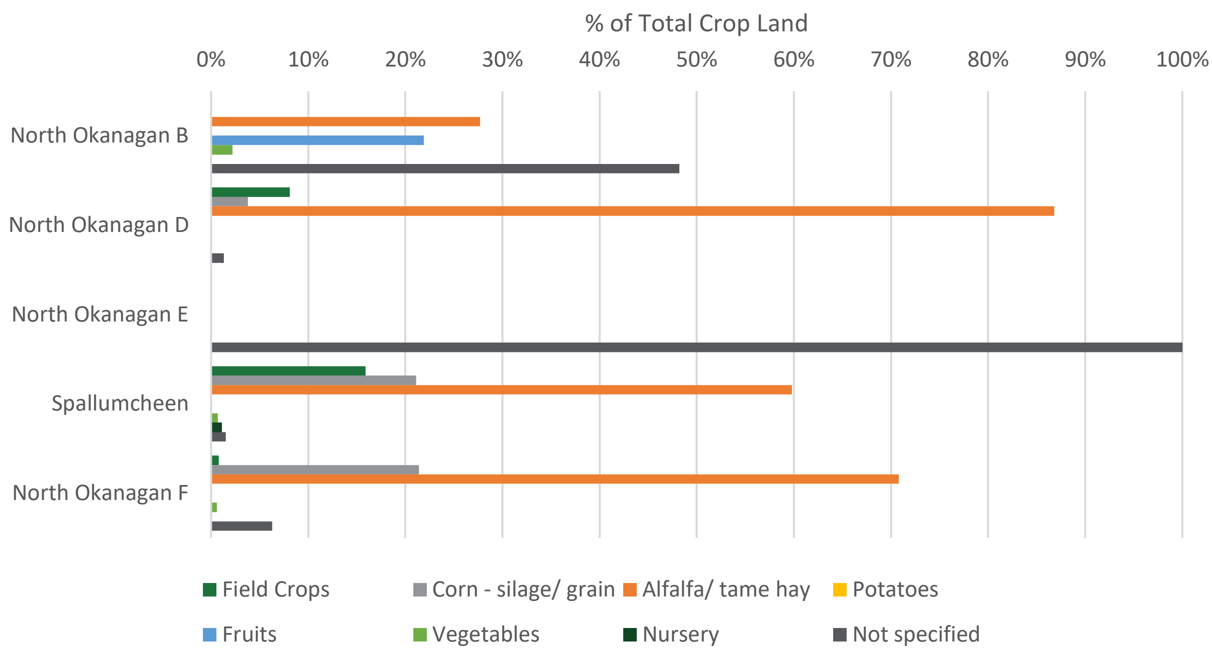

Figure 16. Breakout of the North Okanagan Agricultural Crops within CCS, 2021.

3.3 Primary Livestock Characteristics

RDNO

Table 4 shows livestock trends in the RDNO in 2021. The RDNO supports dairy operations containing 8,013 dairy cows and beef operations accounting for 6,492 beef cows (Table 4). At any point of the year, about 1.2 million meat chickens are being raised and about 42,300 egg laying chickens. The region has about 2,000 honeybee colonies.

Township of Spallumcheen

Spallumcheen supports dairy operations containing 4,756 dairy cows and beef operations accounting for 1,042 beef cows (Table 4 . This represents about 59% of all dairy in RDNO and 16% of beef operations in RDNO. At any point of the year, about 1,028,000 meat chickens are being raised in Spallumcheen, or 84% of the meat chickens raised in RDNO. In addition, at any point of the year, about 34,355 egg laying chickens are being raised, or 81% of the egg layers raised in RDNO. About 47% of the RDNO honeybee colonies are located in Spallumcheen. Table 12 of **Appendix A** provides details on the level of poultry production in the RDNO, highlighting over 13.2 million kilograms of chicken, 270,000 table eggs per dozen, and 4,600 kilograms of turkey production.

[9] Armstrong local. 11 Fresh Flower farms in the Okanagan Valley. https://armstronglocal.ca/flower-farms-in-the-okanagan-valley/

Table 4: Distribution of Livestock in the RDNO by CCS, 2021

Livestock Type	Units	North Okanagan B	North Okanagan D	North Okanagan E	North Okanagan F	Spallumcheen	Location not specified	RDNO
Beef Cows	Number	2,672	2,155	267	356	1,042	0	6,492
Dairy cows	Number	8	493	0	2,756	4,756	0	8,013
Total cows	Number	2,680	2,648	267	3,112	5,798	0	14,505
Ewes	Number	x	319	x	464	338	197	1,318
Sows & gilts	Number	x	11	x	X	16	16	43
Horses & ponies	Number	233	203	24	136	327	0	923
Goats	Number	183	X	x	x	x	269	452
Llamas & alpacas	Number	193	32	0	65	93	0	383
Rabbits	Number	x	14	19	x	x	53	86
Laying hens (1)	Number	x	xX	x	x	34,355	7,932	42,287
Broiler, roasters & Cornish	Number	2,604	75,401	28,102	90,827	1,027,744	0	1,224,678
Total hens & chickens	Number	5,429	76,348	28,337	96,086	1,067,630	0	1,273,830
Turkeys	Number	x	x	x	x	340	135	475
Bees/colonies	Colonies	709	x	x	x	979	411	2,099
Source: Statistics Canada. 2021 Agriculture Census. https://www.statcan.gc.ca/en/census-agriculture Notes: x= data too unreliable to be published. (1) Not including pullets under 19 weeks and layer and broiler breeders								

There is also a diversity of smaller-scale livestock operations producing multiple species in the RDNO. These are not well identified in the Agricultural Census but are further differentiated as organic, heritage, natural, grass-fed, pasture-raised and regenerative operations, including:

- 13 sheep breeding and meat operations
- Pasture raised poultry and eggs, including the following farms:
  - Rieger Farms, Spallumcheen
  - Rosebank Farms, Spallumcheen
  - True North Farm, Spallumcheen
  - Hoisington Farm, Spallumcheen
  - Wild Acres, Spallumcheen
- Natural and organic beef enterprises, including the following farms:
  - 63 Acres Premium BC Beef, a collaboration of livestock producers selling into premium meat markets in the Lower Mainland
  - Elsida Farms, Lumby
  - Vale Farms, Lumby
- Llamas and alpaca crafts and products including the following farms:
  - Camelot Haven Alpacas, Vernon

- Cokal Alpaca Products Inc., Coldstream
  - Brycarda Alpacas, Spallumcheen
- Honey and related products, including the following farms:
  - Stawn's Honey, Vernon
  - The Okanagan Honey Company, Spallumcheen
  - Okanagan Honey, Spallumcheen
  - Planet Bee Honey Farm, Vernon
  - Wild Antho, Spallumcheen
  - Orchard Blossom Honey (Home Sweet Home Apiaries), Spallumcheen

4.0 RDNO AGRICULTURAL ECONOMIC INDICATORS

4.1 Operating Revenues[10]

The distribution of farming operations by revenues is similar in Spallumcheen and the RDNO as a whole, as discussed below and shown in Table 5. Starting in 2021, Statistics Canada also shows the number of farms not generating revenues. These farms represented about 5.3% and 4.2% of total operations in the RDNO and Spallumcheen, respectively.

RDNO

In 2021, operating revenues (ORs) totalled about $182.2 million from 920 farm operations (Table 5) in the RDNO. 73.7% of operators (n=716) generated less than $50,000 in ORs annually and as a group accounted for 4.2% of total ORs in RDNO. 5% of operators (n=49) consisted of farms generating over $1 million in ORs annually and as a group accounted for about 63.7% of total ORs in RDNO. Between 2016 and 2021, the regional agricultural ORs grew by about 3.75% per year while operating expenditures grew by 4.45% (unadjusted for inflation). The average contribution margin[11] across all sectors in the RDNO was 11.7% of ORs in 2021.

Township of Spallumcheen

In 2021, Spallumcheen accounted for over 50% of the RDNO's farming revenues and 36.7% of the RDNO's farming operations. Over half of the RDNO's farm gate sales are generated in Spallumcheen. ORs for Spallumcheen in 2021 totalled about $92.3 million from 357 farm operations (Table 5).

Similar to the RDNO, a small portion of operators account for the majority of ORs for Spallumcheen. Over 70.6% of operators (n=252) generated less than $50,000 in ORs annually and as a group accounted for about 3% of total ORs in the Township Whereas 6.7% of operators (n=24) accounted for approximately 70% of the total ORs. Together, these operators generated over $1 million in ORs annually.

4.2 Paid Farm Labour

Paid farm labour characteristics in the North Okanagan Census Division (RDNO) and Spallumcheen Consolidated Census Subdivision are compared in Table 6. Total paid labour declined 35% in RDNO and 42% in Spallumcheen between 2016 and 2021. Spallumcheen accounted for 27.3% of the paid farm work force in the RDNO in 2021.

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[10] In the 2021 Census of Agriculture, the term "gross farm receipts (GFRs)" was revised to "operating revenues" The purpose is to exclude purchases of commodities resold.
[11] Contribution margin is defined as gross revenues less operating (direct costs) and not including returns to management, fixed costs, or depreciation.

The total experienced agricultural labour force (including farm operators) on farms in 2021 was 1,120 persons, and is projected to further decline in the next 10 years to 2031.[12]

Table 5: Distribution of Operating Revenues by Farm Size, 2021

Annual Gross Farm Receipts	RDNO				Spallumcheen			
	Number of Farms	Percent of Farms	ORs ($mill)	ORs (Percent)	Number of Farms	Percent of Farms	ORs ($mill)	ORs (Percent)
$0	52	5.3%	$0	0.0%	15	4.2%	$0	
$1 to $50,000	664	68.3%	$7.7	4.2%	237	66.4%	$2.8	3.0%
$50,000 to $99,999	61	6.3%	$4.6	2.5%	19	5.3%	$6.0	6.5%
$100,00 to $999,999	146	15.0%	$54.0	29.6%	62	17.4%	$19.1	20.7%
$1,000,000 +	49	5.0%	$116.0	63.7%	24	6.7%	$64.4	69.8%
Totals	972	100%[13]	$182.2	100.0%	357	100.0%	$92.3	100.0%
Source: Statistics Canada. 2021 Agricultural Census.								

Table 6: Paid Farm Labour, RDNO and Spallumcheen, 2016 and 2021

Type	2016			2021		
	RDNO	Spallumcheen	Spallumcheen as % of RDNO	RDNO	Spallumcheen	Spallumcheen as % of RDNO
Year-round, full-time	242	99	41%	267	110	41.1%
Year-round, part-time	130	70	54%	151	53	35.1%
Seasonal	1,039	265	26%	498	87	17.5%
Total (not including family members and unpaid family labour)	1,411	434	30.8%	917	250	27.3%
Source: Statistics Canada. Census of Agriculture, 2016 and 2021.						

5.0 RDNO AGRICULTURAL MARKET INDICATORS

5.1 Level of Activity

Based on Canadian per capita consumption data, RDNO produces the proportions of livestock products indicated in Table 7. RDNO produces surplus milk, beef, and chicken, and has deficits in pork. Deficits may also be experienced

[12] Source: Peak Solutions Consulting Inc. Labour Force Supply and Demand Forecast: 2006-2031 North Okanagan Regional District.
[13] Numbers may not sum exactly due to rounding.

in egg production. While there is data on Canadian per capita consumption of fruits and vegetables, there is no information on how much fruit and vegetables the RDNO produces. Despite this, anecdotal evidence would suggest that the production to consumption ratio of products that can be produced in the region is very low.

Table 7: Estimated Supply and Consumption of Selected Livestock Products, RDNO

Livestock Product	Units	Estimated Annual Production RDNO	Per capita consumption	Calculated Annual Consumption RDNO	Production as % of Consumption
Milk	litres	62,586,000	64.2	5,881,000	1,000%
Beef	Kgs	2,127,000	34.45	1,652,200	128%
Pork	kgs	66,000	18.04	1,312,200	5%
Chicken	kgs	16,598,775	14.32	3,156,000	526%
Eggs	kgs	x	x	x	x

In addition to these statistics, it is important to note that:

- $300 million is spent on food and food products in the RDNO, annually
- In 2021, farm gate sales generated $182.3 million, $92.3 million of which was generated in Spallumcheen alone (or 50.7% of sales)
- The region has over 50 local wholesalers
- 36 mainstream food retail outlets are located in the North Okanagan
- The region has 18 alternative retailers, including small scale retail outlets and tourist attractions
- The region has 10 farmers markets

5.2 Food Marketing Locally

Marketing of specialty products by small scale operations is multi-faceted in the RDNO. This is an asset in terms of providing multiple marketing venues for reaching customers but also a liability in that the independence in market methods contributes to a disjointed presence of products in the marketplace. Vendors market using a variety of techniques to connect with consumers. These include:

- Alliances with other producers under brand name[14]
- Collaboration among producers, processors, and retailers[15]
- Land to Table Network[16]
- Farmers Markets
- FeedBC Directory[17]
- Consignment to local retailers[18]
- Farm gate retail - direct to consumers
- Specialty Food Directory[19]
- Social media channels such as Facebook and Instagram
- FoodBevg - directory of food and beverage services[20]

[14] 63 Acres Premium BC Beef. https://63acresbeef.com/
[15] BC Meats. https://bcmeats.ca/about-us/
[16] North Okanagan Land to Table Network. https://landtotablenetwork.com/
[17] https://feedbcdirectory.gov.bc.ca/search-bc-products/
[18] E.g., Askews Foods, Armstrong; Unearthed Farm, Kelowna; Farmbound, Vernon; Sunreal Organics, Kelowna; Monashee Community Co-op, Lumby; Swan lake Market, Vernon.
[19] BC Specialty Food Directory. https://www.bcspecialtyfood.ca/
[20] FoodBevg. https://www.foodbevg.com/

Food Processing[21]

5.2.1 Larger Scale Food Processing

There is a small number of relatively large food processing companies in the Spallumcheen area. These companies have a long history in the community, even though their markets are regional, and, in most cases, the bulk of their raw feedstocks come from outside of the region. These companies include:

- Fieldstone Organics, Spallumcheen – local ancient grains on 400 acres
- Roger's Foods, Spallumcheen – imported grains
- Gambrinus Malting, Spallumcheen – imported grains
- OK Frozen Dough, Spallumcheen – imported grains and flour
- Rancho Vignola, Armstrong - imported nuts & dried fruit
- Vegpro, Coldstream – packaged local salad greens on 500 acres
- Colonial Farms, Armstrong – local poultry, federally registered meat establishment
- Okanagan Spring Brewery, Vernon
- Okanagan Spirits Craft Distillery, Vernon

5.2.2 Small Scale Food Processing

Local food manufacturing and processing is generally small scale, with a focus on bakeries and processors of honey, fruit, vegetables, custom meat, and dairy products.[22]The region has 23 food processors[23] that comprises of several small-scale artisan cheeseries, wineries, cideries, meaderies and distilleries, egg grading stations, meat processing facilities, abattoirs, specialty foods, and health food manufacturers, as outlined in Table 8.

5.2.3 Other Agri-Processing Initiatives in the RDNO

The current status of other agri-processing initiatives in the region is unknown, but proposals include a Cannabis Business Park in Lumby and a rezoning application in Enderby to facilitate a cannabis production facility in the ALR. In addition, the Township has several cannabis production facilities.

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[21] Food processing is defined as transformation of agricultural products into food and includes the preparation of raw foodstuffs by peeling off the outer layers of the raw materials, chopping or slicing, mincing, liquefaction, fermentation, emulsification, cooking, mixing, gasification, proofing, spray drying, pasteurization and packaging to create dried, cooled, frozen, heated, and pickled preservations.
[22] Upland Consulting. 2015. RDNO Agricultural Plan Background Report. https://manualzz.com/doc/9597067/agricultural-plan-background-report
[23] Upland Consulting. 2015. RDNO Regional Agricultural Plan: Market Opportunities Analysis.

Table 8: Small-scale food processors in the RDNO

Artisan cheeseries, wineries, cideries, meaderies, and distilleries
• Birdsong Farm, Spallumcheen • Edge of the Earth Vineyards, Spallumcheen • Hunting Hawk Winery at O'Keefe Ranch, Spallumcheen • Farmstrong Cider Company, Spallumcheen • Triple Island Farms, Cherryville • Castle Cheese (West) Inc., Lumby • Bx Press Cidery and Farm, Vernon • Planet Bee Honey Farm and Honeymoon Meadery, Vernon • Waterside Vineyard & Winery, Enderby • Baccata Ridge Winery, Enderby/Grindrod • Tony's Craft Cidery, Coldstream • Marten Brewing, Vernon – craft beer
On-Farm egg grading stations
• Shovel Tree Acres, Spallumcheen • Rieger Farms, Spallumcheen • Registered shell egg grading station – Shovel Tree Acres, Armstrong
On-farm meat processing
• Helmut's Kitchen, Vernon
Abattoirs

• 5 provincially licensed abattoirs:
  ○ Lambert Creek Organic Meats Ltd., Grinrod
  ○ JJ Family Farms Poultry Processing, Spallumcheen
  ○ Valley Wide Meats, Enderby
  ○ MacKay Poultry Processing, Vernon
  ○ Fresh Valley Farms (Armstrong Artisan Meats), Spallumcheen
• 3 poultry processors:
  ○ Fresh Valley Farms (Armstrong Artisan Meats), Spallumcheen
  ○ JJ Family Farms Poultry Processing, Spallumcheen
  ○ MacKay Poultry Processing, Vernon
• 3 livestock processors
  ○ Valley Wide Meats, Enderby, affiliated with BC Meats, a producer-to-consumer value chain organization
  ○ Lambert Creek Organic Meats, Grindrod
  ○ Fresh Valley Farms (Armstrong Artisan Meats), Spallumcheen
• 1 Farmgate license:
  ○ Gardom Lake Farm, Enderby
• 1 Farmgate Plus license:
  ○ 3 Willows Homestead, Spallumcheen

Chocolatiers, bakeries, and specialty foods
• Snow Cap Interior Food Services Ltd., Spallumcheen • Chocoliro Finest Chocolate, Armstrong • Silver Star Chocolate Co., Vernon • Cottons Chocolate, Vernon • Rumaican Foods and Goods, Vernon • Canadian Organic Popcorn Co. Inc., Vernon • Olive Us Oil & Vinegar Tasting Room, Vernon • Denzel's Gourmet Foods Ltd., Lumby
Health food manufacturers
• Wildcraft Forest, Lumby – wild teas and essences
On-farm processed food direct sales outlets
• Approximately 80 local producers for craft jams, jellies, sauces (e.g. farm gate sales, markets, etc.)

5.3 RDNO Agricultural Employment

Employment in farming and agriculture-related industry is about 5.5% of the regional work force. Employment in food manufacturing and beverage and tobacco product manufacturing was 510 persons in 2016, projected to grow to 585 persons by 2031, or at a compound rate of less than 1% per year.[24] Overall growth in the agricultural labour force was projected to grow at a compound rate of 1% per year (these numbers could not account for natural disasters and COVID-19 pandemic impacts from 2019 to 2021).

5.4 RDNO Agricultural Policy Scan

5.4.1 Regional Growth Strategy

Generally, the North Okanagan business community consists of a large number of small- and medium-sized enterprises with 91% of all businesses having less than 20 employees. The RDNO's Regional Growth Strategy (RGS) was prepared in 2011[25], with an update in 2020. The RGS indicates a number of policy goals pertaining to agriculture, including:

- Discouraging the removal or subdivision of lands in the ALR;
- Developing a Regional Agricultural Economic Development Plan; and
- Collaborating with farming interests, local governments, and other stakeholders to identify and create new agricultural opportunities, including local value-added production, processing, distribution, marketing, and agri-tourism.

A Bylaw Amendment process (Bylaw 2923) is currently underway with the Regional District to designate the study area for this feasibility study as Employment Lands-Agriculture in the Regional Growth Strategy. These lands have been identified for agricultural businesses that strengthen food security and opportunities to provide locally grown and processed food. The North Okanagan is home to a rich agricultural history, and as the region's agricultural communities continue to grow, innovation and new opportunities for farmers must be considered to achieve a Regenerative Agriculture and Agritech Network (RAAN) by bringing together natural systems of production with agri-technologies that enhance production, resulting in new jobs and increased localized food systems. The RAAN is a

[24] Source: Peak Solutions Consulting Inc. Labour Force Supply and Demand Forecast: 2006-2031 North Okanagan Regional District.
[25] RDNO. 2011. Regional District of North Okanagan Bylaw No. 2500,2011. https://www.rdno.ca/sites/default/files/2021-04/BL_2500_C.pdf

new provincial initiative launched in 2021 to help farmers adopt the latest technology to increase profitability and environmental sustainability. Lands located within the ALR would need to conform with the ALC regulations and/or seek approval from the Commission.

5.4.2 Agri-Processing Recommendations in Agricultural Plans

Spallumcheen Agricultural Plan, 2006[26]

The Township's first Agricultural Plan provides direction for encouraging agri-processing in the community, as outlined below.

Goal #1: Support and Strengthen Local Agricultural Enterprise

Action 2: Work with producers to develop an agri-industrial strategy that could include:

- investigating the potential for marketing co-ops;
- shared space in the industrial park, such as community kitchens, incubator for value-added processing of agricultural products;
- branding (promote local food and food security and local procurement with institutions, agencies, etc.)
- signage; and
- processing facilities.

Spallumcheen Agricultural Area Plan Update, 2014[27]

The Township's Agricultural Plan was updated in 2014 with further discussion on agri-processing and direction on developing a strategy to further encourage these types of agricultural operations.

Goal #1: Support and Strengthen Local Agricultural Enterprise

Strategy:

- Increase community demand for local agricultural products
- Increase the amount of agricultural revenue that gets re-spent within the community
- Reduce the cost of doing business in Spallumcheen
- Take unnecessary middlemen out of food supply and marketing chain
- Promote the quest for quality of local food products
- Promote diversification of local food products
- Promote efforts that attract and create diversification of agro-based suppliers
- Promote efforts that attract agro-based industry to create value-added benefits within the Township
- Provide opportunities to recruit new farmers into the sector
- Encourage local farmers to work together to improve the local agro-economy

Opportunities:

- Create advertising programs for local products

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[26] Zbeetnoff Agro-Environmental Consulting and Quadra Planning Consultants. 2006. Township of Spallumcheen Agricultural Are Plan; Phase 3 Final Report.
[27] https://spallumcheen.civicweb.net/document/7554/

- Attract local agri-business, especially meat processing
- Create business incubator opportunities
- Create a clearinghouse of small acreages (pool) available for agricultural use
- Investigate property tax incentives and leasing arrangements for making agricultural land available in a pool
- Create "North Okanagan Pride" labeling (branding) for products
- Promote local products in local retail outlets
- Promote concept of local buying (within 100 km)
- Create a marketing co-op among producers
- Create co-ops for land banking, machinery and manufacturing
- Consider an improved and more attractive location for farmers' market
- Create better signage on farms and along highway to create greater public awareness (standard Spallumcheen agricultural sign)
- Promote a weekly newspaper column featuring farmers along with a local recipe featuring seasonal foods
- Consider an annual farmer's open house
- Establish local milker's training for young people
- Support creation of a Farmers Council

Coldstream Agricultural Plan, 2009[28]

One of Spallumcheen's neighbours to the south, the District of Coldstream, also has an agricultural plan that provides direction on encouraging development of agri-industry in the community.

The plan highlights the following considerations

- Strong connections to other regional leaders and advocates for farming.
- Collaborating with other areas to make more efficient use of research and services
- Difficult for smaller operations to fund investments in marketing and research. To

  achieve economies of scale for marketing and promotion it is suggested that a regional function be established.
- Farmers are more likely to be successful if there are opportunities for economies of scale in funding needed services and infrastructure (e.g., local food marketing cooperative).

Source: Township of Spallumcheen

Strategies for region-wide marketing and economic development would provide opportunities for economies of scale in promoting agri-tourism, research to enhance the agricultural industry, agriculture processing, marketing, and training, niche agricultural industries, expansion of infrastructure services and processing facilities.

[28] https://coldstream.civicweb.net/document/2222/

RDNO Regional Agricultural Plan

In 2015, the RDNO completed a Regional Agricultural Plan (RAP)[29]. The RAP built upon the RGS and recommendations of agricultural plans completed previously for Spallumcheen[30],[31] and Coldstream[32].

In developing the RAP, the Regional District identified several issues and opportunities pertaining to agriculture's economic performance[33]:

- Biophysical considerations - availability of water, climate change effects, implying a need for conservation.
- Marketing and branding – indicating a need for more streamlined marketing to access a large market for local products
- Costs of doing business and the need for investment – identifying a need for agricultural entrepreneurs to become more efficient, seek tax concessions, and scale up their operations to improve viability.
- Transportation and distribution – need for support systems and networking to improve small-scale access to transportation and distribution networks
- Access to skilled and affordable labour – related to the availability of workers, labour cost, and accommodation.
- Expansion of niche and value-added products – lots of demand potential but limited entrepreneurial uptake due to various financial, technology and knowledge constraints.
- The regional tourism market – increased market for agri-tourism and potentially, food tourism
- Regulatory challenges – need for assistance in navigating more stringent meat regulations and working with procurement and marketing in supply managed systems.
- Innovation, research and education – towards adopting sustainable practices and adapting to climate change.

In the RAP, Priority 2: *Strengthening the Local Agricultural Economy* recommends seven actions, with one having direct relevance to the promotion of agri-processing in Spallumcheen:

- 2.2 Continue to support the objectives of the Regional Employment Lands Action Plan that closely match the intent of the Regional Agricultural Plan. Topics of common interest may include ensuring that agriculture is highlighted as a key employments sector, and co-locating agri-industrial and agri-support business through land use designation.

5.4.3 RDNO Employment Lands Action Plan

In 2016, the RDNO Employment Lands Action Plan[34] was completed and has served as a template for industrial expansion in the Regional District. In the report, the following strategic plan for industrial lands planning was adopted:

- Identification of a Regional Investment Corridor, situated within 1 km of a provincial highway (specifically Highways 6 and 97).

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[29] Regional District of the North Okanagan. 2015. Regional Agricultural Plan. https://www.rdno.ca/sites/default/files/2021-06/150915_RAP_Final.pdf
[30] Zbeetnoff Agro-Environmental Consulting and Quadra Planning Consultants. 2006. Township of Spallumcheen Agricultural Are Plan; Phase 3 Final Report.
[31] Township of Spallumcheen. 2014. Township of Spallumcheen Agricultural Area Plan: Agricultural Advisory Committee Amended Version 2014. https://spallumcheen.civicweb.net/document/7554/
[32] TRUE Consulting Group. 2009. Coldstream Agricultural Plan. https://coldstream.civicweb.net/document/2222/ and TRUE Consulting Group. 2009. Background Report. https://coldstream.civicweb.net/document/2227/Part%201%20agricultural_plan_background_report.pdf?handle=776F96269E12449EA9DF6B8E5326645A
[33] Upland Consulting. 2015. RDNO Regional Agricultural Plan: Market Opportunities Analysis.
[34] Urban Systems. 2016. Employment Lands Report. Prepared for the RDNO. https://www.rdno.ca/sites/default/files/2021-06/160426_RELAP_Final_Print_reduced.pdf

- Identification of the City of Armstrong (agricultural services) and Township of Spallumcheen (agri-processing) as growth areas in support of agriculture.

These policies clearly identify the need for agri-processing in the context of sustaining the North Okanagan's agricultural sector. Moreover, the policies give suggestion as to where such development should occur.

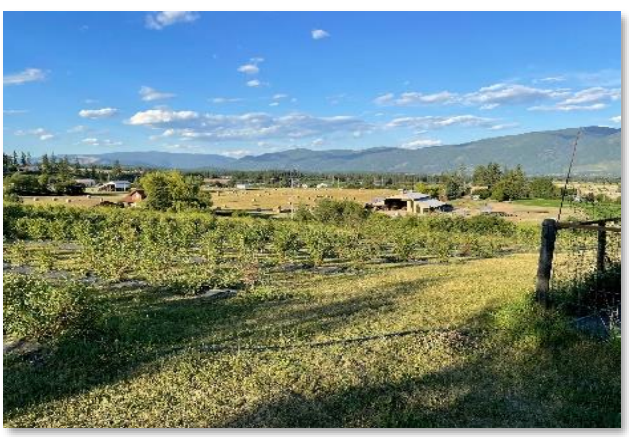
5.4.4 Agri-Processing Recommendations in Official Community Plans

Table 9 provides an overview of the policy direction provided on supporting agriculture in local Official Community Plans (OCPs).

Table 9: OCP Policy Direction

Coldstream Official Community Plan, 2015[35]	Electoral Area F Official Community Plan, 2016[36]	Spallumcheen Official Community Plan, 2011[37]	Vernon Official Community Plan, 2013[38]
8.6.1 Agricultural Industrial Consider permitting agricultural industrial uses within lands designated Agricultural or Rural 2. Approval of industrial uses would require rezoning to an industrial zone.	*3.1.8* Agricultural Industrial land uses that support local farm production should be encouraged. This type of agricultural use shall process or manufacture agricultural products, shall not be intrusive nor offensive to the surrounding area, shall be located sensitively to avoid high capability soils and shall not contaminate ground or surface water.	*6.8* Encourage the sustainability and future viability of agricultural land within Spallumcheen by supporting the goals identified in the Township's Agricultural Area Plan.	*15.0* Encourage agricultural economic development through support for agri-tourism, value added production, agricultural business start up activities and intergenerational learning/land transfer.

6.0 RDNO AGRICULTURAL MARKETS AND AGRI-PROCESSING OPPORTUNITIES



Market opportunities have a direct bearing on the potential feasibility of value-adding options. A market opportunities analysis[39] was completed as a complement to the RDNO Regional Agricultural Plan. In the report, agricultural issues and potential solutions were identified. Table 10 below summarizes those findings with focuses on production, markets/marketing, and value adding.

Source: Township of Spallumcheen

[35] https://coldstream.civicweb.net/document/25947/
[36] https://www.rdno.ca/sites/default/files/2021-04/_BL_2626_no_maps_C.pdf
[37] https://spallumcheen.civicweb.net/filepro/document/2583/Bylaw%201794%20-%20OCP-Consolidated%20-%20Feb%202015.pdf
[38] https://www.vernon.ca/sites/default/files/docs/bylaws/OCP/15agriculture.pdf
[39] Upland Consulting. 2015. RDNO Regional Agricultura Plan: Market Opportunities Analysis.

Table 10: Summary of Regional Agricultural Market Situation, Constraints, Opportunities, and Needs.

Current Situation		
Production	*Markets/Marketing*	*Value Adding*
• Well-established supply managed sectors – dairy, poultry. • High proportion of crops grown are in support of the livestock sectors. • Small but growing presence of small-scale organic beef, poultry, sheep, flowers, vegetables, orchards, apiaries • Many growers not producing most lucrative crop options. • Many growers not investing in niche product development. • Cold storage in the area is at capacity. • Increasing presence of wineries, cideries, farm-direct sales, agri-tourism, and non-food agriculture. • Land matching programs seeking to match landless young farmers with under utilized farmland under flexible leasing arrangements.	• Increasing demand for local fresh and processed foods. • Increasing number and acres of small fresh market operations, organic, vegetables, fruits. • Increasing consumer awareness of the benefits of eating locally. • There are consumers willing to pay premium prices for quality local products. • Increasing demand for land for rural estates.	• Milk shipped to regional facilities outside of the RDNO for processing. • Poultry processed in the region. • Eggs shipped to regional facilities outside of the RDNO for grading. • Limited beef sector and other livestock processing opportunities in the region. • Additional transportation and distribution costs associated with livestock needing to be shipped out of the region for finishing and processing. • Some cheese and bakery processors have moved out to the Lower Mainland to facilitate expansion. • Meat inspection regulations discourage local slaughter, butchering, and processing
Constraints and Limitations		
Production	*Markets/Marketing*	*Value Adding*
• Additional costs incurred to access the local market for advertising, transportation, storage, packaging, and retailing.	• Limited marketing presence in social media and online advertising	• Limited skills and knowledge of processing technology, equipment, and food safety.

• Farmers markets are inefficient options for many. • High cost of labour, chemical and fertilizer inputs, fuel. • High cost of new farmer entry. • High cost of fragmented transportation system. • Financial inability to scale up operations to a commercial level. • Limited access to land. • Limited public knowledge of food systems. • Limited producer technical skills, business acumen, knowledge of policy and regulations. • Resource constraints, such as water.	• No branding or tagline for RDNO agricultural products. • Marketing Boards limit entry in supply managed sectors, the distribution of related products locally, and marketing channels. • Food distribution system is not accessible to many due to small size of operations, costs of reaching the market, absence of storage and distribution centres, and gaps in labeling, quality control, traceability, and food safety knowledge.	• Additional transportation and distribution costs associated with livestock needing to be shipped out of the region for finishing and processing. • Food processing is centralized outside of the RDNO. • Regulations for long supply chains (global) are onerous for short supply chains (local). • Lack of labour.
Opportunities		
Production	*Markets/Marketing*	*Value Adding*
• Create a Farmers Institute to mentor young farmers and to improve information transfer. • Work cooperatively to access the existing food distribution system and/or create a new distribution system.	• Engage in more effective in-store marketing. • Access telecommunications networking capabilities and software applications to streamline food products marketing. • Promote awareness of agriculture in online and social media applications. • Develop a Brand. • Promote the RDNO agricultural industry to the consumer public and schools.	• Differentiate RDNO food products on basis of GMO status. • Create farm tours and on-farm agri-tourism related facilities. • Create agri-recreation opportunities. • Access innovative and creative niche food service opportunities in the home care market using local ingredients. • Respond to demand for canned goods, sauces, marinades, jams, baked goods, frozen goods.
Needs and Desires		
Production	*Markets/Marketing*	*Value Adding*
• Promote collaboration between farmers and processors. • Collaboration of farming community with research centres, universities, and colleges.	• Agri-tourism promotion. • Community event area. • Restaurants serving locally sourced menus. • Public food market.	• Establish or support commercial kitchen and food processing, teaching, and incubator area.

• Collaboration of farming community with school districts and community organizations. • Provide education opportunities, extension services for farmers. • Develop niche crops and food products based on resource-efficient, sustainably-grown, locally-adapted crops and varieties. • Need for a strategic response to climate change impacts on water resources, pests, adapted crops and varieties. • Workshops, forums to disseminate information in the region.	• Workshops, forums to encourage collaboration and connections throughout the food supply chain.	

6.1 Agri-industrial Developments Elsewhere

6.1.1 Saskatchewan Agri-Food Value Chain Initiative[40]

In the course of the project, an opportunity presented itself to have a virtual meeting with Bryan Kosteroski, Executive Director of the Saskatchewan Agri-Food Council, to discern if there were options and strategies that might be applicable to the Spallumcheen situation. Key observations from the meeting included:

- The value chain of agricultural products comprises a collaboration and alliance of producers with chain partners to grow to the market.[41]
- The purpose of the value chain is to create value along the chain by increasing efficiencies, delivering consistent supply, increasing food traceability, improving knowledge and information sharing, reducing costs, providing market differentiation, improving capabilities and capacities, and reducing and spreading risks.
- Adoption of the value chain approach would streamline a transition into new crops demanded by consumers by reducing the risk associated with tapping into new markets.
- There is opportunity to apply the value chain approach to the mix of commodities currently produced in the RDNO, including dairy, meat, and poultry.
- In light of Spallumcheen's predominant orientation toward livestock production, the opportunities and capacities for profitable horticultural production and other types of agriculture remain largely untapped.
- Collaboration and coordination have the potential to create critical mass, standardize profitable production practices, and leverage the marketing clout of numerous small-scale suppliers.
- Extrapolated to the agri-processing sector, there is additional opportunity to create a value chain in the food service industry to access markets that are currently not accessible to RDNO producers.

[40] Agricultural Council of Saskatchewan Inc. https://agcouncil.ca/programs/value-chain/
[41] Global value chains and local value chains are well established in BC and elsewhere. Fluid milk flows into processing plants for domestic uses. Fruit (apple, cheery, peach, pear, etc.) flows into the fresh fruit markets after co-packing and marketing.

- The value chain concept is fully compatible with agri-processing initiatives being pursued by Spallumcheen and that have been recommended in other Agricultural Plans.

One of Saskatchewan's agriculture value chain focuses has been on its reputation for high-quality food and ingredients. Success stories include the expansion of the pulse sector to be the largest exporter in the world along with canola, durum wheat, flaxseed, mustard seed, and oats. Protein Industries Canada has brought together a cluster of research and development resources and industry stakeholders to develop new products from these high-quality resources.

Figure 17 shows a typical agricultural value chain. Ideally, "value" is added at each stage of the product from production to consumption.[42] Successful chains are characterized by quality-based competition and vertical coordination.

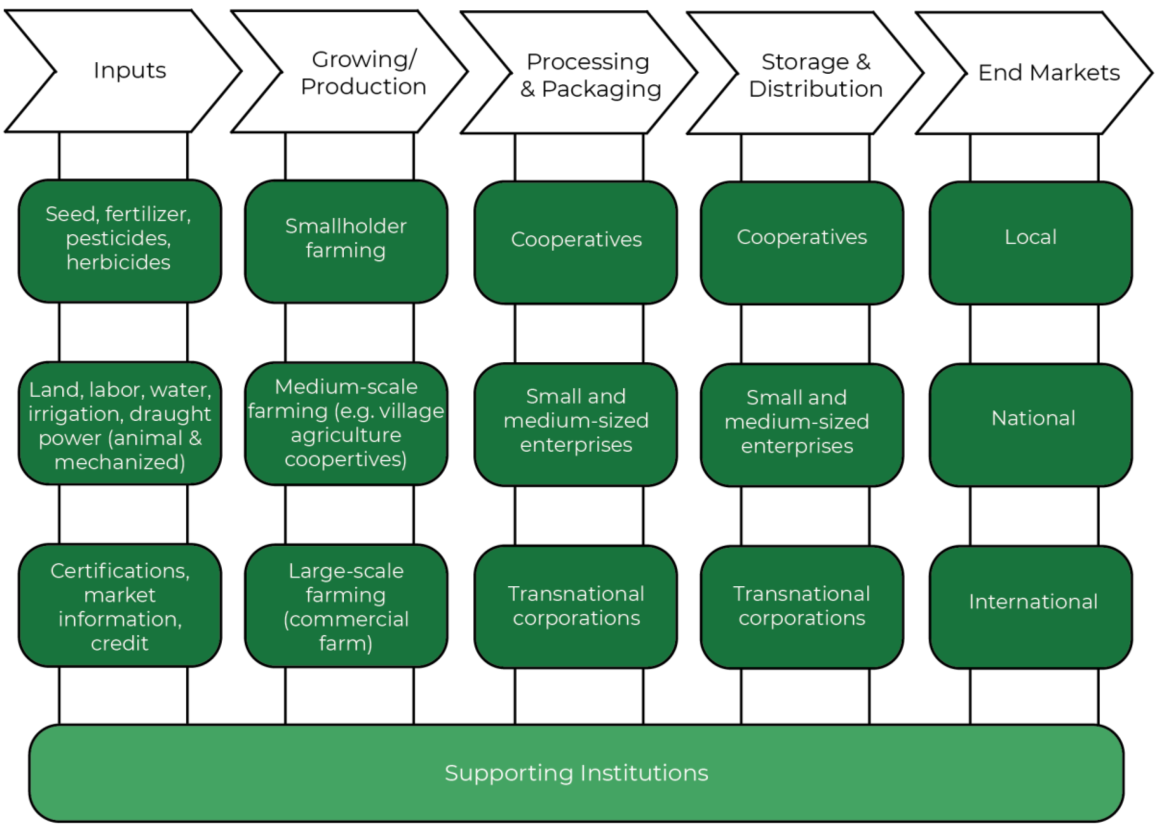


Figure 17. Typical Agriculture Value Chain Structure (Source: Duke CGGC).

[42] A value chain is a set of actors and activities that bring a basic agricultural product from production to final consumption where at each stage value is added to the product. This is accomplished by linking producers to processors and markets in the flow of products, knowledge and information, finance, payments, and the network of relationships needed to organize producers and communities.

6.1.2 OAFVC Services (Ontario Agri-Food Venture Centre)

OAVFC Services is a "pay to play" facility concept[43], established to launch production at the OAFVC, including those looking for economic sustainability through shared production and storage spaces, and those seeking a way to continue scaling-up production while working out the details of moving into a built-to-purpose facility or partnering with a co-manufacturer.

The model is most suited to clients who have a proven production process. The facility provides access to clean, food manufacturing spaces and qualified production support staff.

The OAFVC provides access to safe, clean, food manufacturing spaces and qualified production support staff. Clients join a network of food entrepreneurs and industry supporters whose experiences and resources help the OAFVC drive opportunities for innovation. Services offered include:

- Shared manufacturing spaces and equipment with verified cleanliness
- Production assistance and equipment necessary to scale up to efficient, innovative food processing
- Dry, cold, and frozen on-site storage of ingredients, packaging, and finished products
- Pelletizing, packaging, and storage services aimed at increasing product shelf life

6.1.3 Food Hub Concept in BC

In BC, there are 12 food hubs operating or under development focusing on regional processing and innovation[44]. While the commodities and priorities shift from hub to hub, all initiatives recognize that local small-scale food processors need community support to start and scale up their potential businesses. Features may include:

- Shared commercial kitchen
- Food processing advisory services including hazardous analysis critical control point (HACCP) management, labeling, food safety, formulation, and product design
- Specialty food processing equipment
- Warehousing, cooler and freezer storage
- Co-packing services
- Commercial teaching and training
- Business development services, including advice on programs and other supports
- Access to research, science, and technology for innovation and product development
- Agricultural support services
- Retailing space

Food Hub Examples

Creston

A hub of particular interest is the Creston Food Hub[45], which began operation in 2021 and will be fully launched in 2022. This model explicitly recognizes the need to help regional food and farm businesses grow and innovate by giving them access to dedicated community-based processing equipment and facilities they might otherwise not afford. The project is in partnership with the Central Kootenay Regional District and received planning funding from the Columbia Basin Trust and the Creston Valley-Kootenay Lake Economic Action Partnership. A key feature is the

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[43] https://www.northumberland.ca/en/ontario-agri-food-venture-centre/services.aspx
[44] See https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/growbc-feedbc-buybc/feed-bc-and-the-bc-food-hub-network/bc-food-hub-network/regional-food-processing-and-innovation-hubs-in-bc
[45]Creston Food Hub. https://www.fieldsforward.ca/regional-food-hub/

relationship the hub has with the Fields Forward Society, a community organization with the experience and expertise to manage the facility and with the foresight to obtain a grant as the lead community group in the food hub.

Salmon Arm

Salmon Arm has recently invested in a new food hub for local and regional farmers and entrepreneurs. The need was expressed for having a number of business functions to help the food industry grow. This project is community-based and fits the local needs well – it is not viewed as being in competition with any agricultural centres in the Vernon area despite attracting interest in services from agricultural stakeholders further south in the Central Okanagan. The hub has rented a building for the use of clients, providing the option for daily rent or long-term rent. Food trucks are a growing niche for the hub.

Food Hub Models

The project development in Salmon Arm provides useful lessons in showing how efforts were coordinated and staged to bring the hub to fruition. Having a qualified champion is considered vital for increasing chances of success at creating a community agri-hub. The food hub business model requires collaboration, shared resources, and business and political leadership. The business model which meets local farm and processor innovation needs must also be sustainable and market-focussed.

The model of a food hub is noted below. A food hub can have several functions to help bridge from production to processing and customers and retail markets. The food hub concept has been used in many locations (mainly in the United States) to help producers and consumers access and participate in an active local food marketplace. A food hub may have a number of functions based on local needs, such as:

- Providing a commercial kitchen for rent and shared use
- Warehouse facility for farm products to be graded, stored, and distributed
- Marketing and selling for farmers
- Developing new branded food products
- Expanding the role and reach of social enterprise in the food industry
- Becoming a centre for new innovations in the interface of agricultural products, food products, and consumers.

Figure 18[46] shows how the food hub concept may develop, recognizing that well coordinated food hubs help food producers and consumers, as well as spur local economic development.

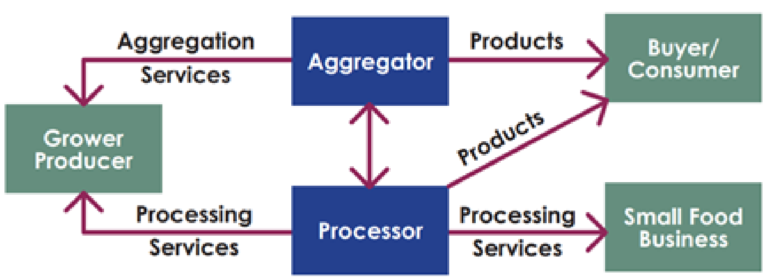

Figure 18. Food Hub Concept Development.

[46] Lindsey, TC and J. Slana. 2012. Building successful food hubs: A business planning guide for aggregating and processing local food in Illinois. https://www.newventureadvisors.net › 2016/01

In British Columbia, the Province has focused on feeding the population with local food wherever possible.[47] It is important to note that a local processor will need to meet food safety and processing regulations and any other requirements the buyer has in place. A food hub can help overcome that gap with advisory services, shared space and equipment, warehousing, and other logistics. Some recent examples at the time of writing this report include development of an agri-food centre plan in Quesnel (received $500,000 in funding), development of the Agriculture Centre of Excellence at University of the Fraser Valley (received $1 million in funding), creation of a shared agricultural facility in Summerland, start-up mode of a shared commercial kitchen and warehouse for small-scale processors and farmers in Mission, and applied research programs in the Cariboo Regional District.[48] The development process for all of these projects included: a draft agri-food business concept, a stakeholder engagement process, a draft business plan, and selecting local business and political champions to help lead and advocate for the projects. Additional information on food and agri-hubs in British Columbia is provided in **Appendix B**.

7.0 STAKEHOLDER ENGAGEMENT

In February and March 2022, 28 stakeholders participated in interviews about agri-industry in the RDNO and more specifically, in the Township of Spallumcheen. These respondents were selected from pre-arranged categories to ensure coverage of the spectrum of activities in the region:

- On-farm agri-processing
- Off-farm agri-processing
- Goods & services suppliers
- Business development
- Wholesaling/retailers
- Institutions
- Financing/lenders

The sampling of North Okanagan and Spallumcheen agri-businesses represents those who were contacted by email and/or telephone and agreed to participate in the engagement process. Nevertheless, while the sample size is relatively small and to an extent self-selected, the congruence of opinions and perspectives across sectors is high. The contents of this section summarize the comments that were received during the interviews.

In addition to the interviews, a community survey was hosted on the Township's website with hard copies available at the Township office. The survey was distributed to agricultural stakeholders in late November and December 2021 and was reopened to the public in January and February 2022. The survey aimed to identify the challenges currently experienced by members of the agricultural community and opportunities for the future. A total of 102 responses were collected, the results of which are included as **Appendix C** to this report.

7.1 Participant Connection to the Agricultural Industry

Connection to Industry	Numbe
On-farm agri-processing	4
Off-farm agri-processing	5
Goods & services suppliers	3

[47] See Feed BC program, which strives to link producers to local food demand and buyers.
[48] See North Fraser Food Hub and Innovation Centre Business Plan, Dec 2018; Cariboo Agricultural Research Alliance (CARA), May, 2017; Quesnel Agriculture Centre Feasibility Study, April 2016; Okanagan Agriculture Innovation Centre Business Plan, May 2018 and Agri-food Directions to 2020: Trend and Technology Drivers, UFV, May 2013 as examples of centres to address regional innovation needs, gaps, programs and facility requirements in agri-food. Prepared by D. Toma, PAg, FCMC

Warehousing/wholesaling/retailer	3
Business development	5
Institutional/organizations	4
Farm organizations	2
Financier	1
Total	27

7.2 Product Focus of the Respondents

Product Focus	Number
Meats	3
Grain	4
Supplies & services	2
Beverages	1
Nuts	1
Fruits & vegetables	1
All products	3
Not applicable	13
Total	27

7.3 Top Limitations to Agricultural Development and Growth

Interview participants were asked to identify their top 5 limitations or barriers that they were experiencing or could see developing in the North Okanagan.

7.3.1 On-Farm Food Processors

On-farm food processers indicated that the biggest constraints to agri-development[49] are pertaining to:

1. **Facilities**
   - Limited access to cold storage and warehousing space and continuity from farm to customer.
   - Limited shipping and warehousing space for small-scale want-to-be commercial operations.
   - Lack of product distribution, staging and freight coordination.
   - Inefficient crop primary processing[50] lines.
   - Inadequate conventional and organic processing lines for diverse animal types.
   - Lack of space to process, freeze and store products.
2. **Skills**
   - Inadequate management and business skills.

[49] Agri-development is used here to mean the use of processes to transform raw foodstuffs.
[50] Primary processing refers to processes to clean, sort and remove inedible pieces. Secondary processing is the conversion of products of primary processing into other food products.

- Scarce access to co-packing knowledge and technology.

3. **Services**
   - Poor access to food supply chains.
   - Inability to source packaging, glass, and other materials locally.
   - Lack of potable water in unorganized locations.
   - Inadequate utilities such as transportation roads, reliable power, and access to natural gas.
   - Unreliable internet in rural areas.
   - The absence of labour and the housing required to accommodate farm workers.
4. **Regulation**
   - Regulations governing development in the ALR (e.g., while the ALC allows agri-tourism, the rules and approval processes to get approvals are onerous and time-consuming)
   - Inability to meet regulations for out-of-region/province shipments

7.3.2 Off-Farm Food Processors

Off-farm food processors tend to be the larger processors, marketing primarily outside the region but with historical ties to the region itself. The biggest constraints to agri-development that this group indicates include:

- Need for grain storage and grain-cleaning facilities to support millers and maltsters.
- Lack of access to railway sidings, no coordination with local needs.
- Lack of labour, management and workers, and acute housing shortage.
- Local farming community not persuaded to produce crops for secondary processing operations due to lower margins and higher volumes needed to support such facilities.
- Lack of local primary processing to support local secondary processing, creates higher environmental and trucking costs.
- Other market access limits including finance, supply chain contacts, export regulations, and deep business knowledge

7.3.3 Input and Service Suppliers

Input and service suppliers indicated that the top limitations to agri-development are:

- Constraints for mainstay sectors (e.g., road load restrictions, access to a railway)
- Inadequate warehousing space for inputs staging and distribution.
- Finding affordable land with a good location.
- Loss of support services to mainstay sectors, e.g., abattoirs, rendering, trucking companies.

7.3.4 Distributors and Retailers

This grouping indicated that the top limitations to agri-development were:

- Seasonality and supply of local fresh produce.
- Producers attempting to obtain retail pricing at the wholesale level.
- Limited producer knowledge of product storage and handling infrastructure costs.
- Limited producer knowledge about price competitiveness and product differentiation in the marketplace.
- Labour availability and shortage of housing.

7.3.5 Regional Organizations and Institutions

This grouping included business development entities, local colleges, agencies, agricultural organizations, food hubs, and potential funders. They indicated that the top limitations to agri-development are:

- Lack of local organization and leadership.
- Lack of industry collaboration, shared resources, and networks.
- No formal individuals to champion efforts.
- No integrated local "farm" system for food processors to make contacts, develop ideas, secure financing, and obtain training and experience (Notwithstanding the positive impacts of Small -Scale Processors Association, Young Agrarians, Land to Table, and Community Futures North Okanagan Reach program.

Although the local organizations exist now there is no overarching governance and coordinating group to lead, advise and address the food hub gap. Leadership on a collaborative basis would help tie efforts together and more likely create a regional impact with greater buy-in. This gap was expressed by several stakeholders and the municipality can assist with facilitation).

- In the absence of centralized options, some farmers are building their own on-site facilities, but likely to be less efficient and more costly than a regional approach over the long term.

7.4 Top Opportunities for Agricultural Development and Growth

7.4.1 On-Farm Food Processors

On-farm food processers indicated that the biggest opportunities for local agri-development are:

- Consumers valuing locally grown food products more dearly since recent COVID-19 and climate change events that caused supply disruptions.
- Drying, dehydrating, and freezing of fruits and vegetables.
- Egg, dairy, and poultry processing capability.
- Development of a cold chain food hub and distribution centre.
- Development of a commercial kitchen to facilitate agri-processing up-scaling and innovation.
- Food processing of prepared meals and agri-tourism.
- Creating local food products for food-based tourism to increase the quality of winery, distillery, meadery, and cidery experiences.
- Pivoting off grass-fed beef, creating butchering capacity.
- Servicing small, scattered farms to improve efficiencies of food products procurement and distribution.
- Cannabis processing.

7.4.2 Off-Farm Food Processers

Off-farm food processers indicated that the biggest opportunities for local agri-development are:

- Increasing demand for locally produced food products.
- Greater production and use of local ingredients in their own operations.
- Need for procurement of organic raw feedstuffs in their operations.

7.4.3 Inputs and Services Suppliers

Inputs and services suppliers indicated that the biggest agri-business opportunities include:

- Providing bulk specialty feed options to small-scale producers, all livestock species.
- Procuring local ingredients for feed manufacturing.
- Agricultural diversity (this can be good for business).
- Supporting commercial agricultural initiatives that utilize inputs and services.

7.4.4 Distributors and Retailers

This grouping indicated that the top opportunities for agri-development are:

- Increased direct-to-market sales.
- Focusing on addressing supply chain issues and the idea of local production being more resilient to disruptions.
- Local protein (this sells well).
- Production of value-added products.
- Increased supply of long-term storage.
- Meat processing.
- Provision of kitchen facilities.

7.4.5 Regional Organizations and Institutions

This grouping was quite interested in this project and demonstrated strong support. They indicated that the biggest agri-business opportunities include:

- If land is suitable for high value production, renting or selling to willing farmers.
- Food hub/shared facility concept (note that it is difficult for this group to define what is needed).
- Pet and organic animal feeds.
- Cold and dry storage.
- More meat processing.
- Egg grading.
- Dairy fluid milk, yogurt, and cheese production.
- Greenhouse vegetable production.
- Focus on high value crops.
- Increased farm gate sales and agri-tourism which builds on provincial natural assets of mountain, forest, and lake landscapes.

7.5 Actions Needed to Address Limitations and Opportunities

7.5.1 On-Farm Food Processors

On-farm food processers indicated that the actions required to address limitations and take advantage of opportunities for local agri-development are:

- Remembering to service primary agriculture as this could be lost if not adequately serviced.
- Developing a community-owned, not-for-profit agri-processing facility.
- Investigating a community butchery concept.
- Prioritizing networking and communication with community builders and leaders (e.g. politicians, economic development initiatives, agricultural organizations).

- Creating a home for the North Okanagan extension of Accelerate Okanagan and adding extension capability to educate agri-producers and processors on business concepts[51]
- Developing a fast-tracking approval process with the ALC.
- Focusing on enhancing local food production with local customers being the bread-and-butter clients.
- Creating a venue for access to product development, technology, and co-packing.
- Providing resources for small businesses in marketing, accounting, and financing.
- Encouraging collaboration in distribution, processing, and marketing.
- Increasing capacity and resources for price-setting.
- Developing a clearinghouse for costing out of supplies.

7.5.2 Off-Farm Food Processors

Off-farm food processers indicated that the actions required to address limitations and take advantage of opportunities for local agri-development are:

- Decentralizing the economy out of the cities by bringing local manufacturing back.
- Creating an agri-industrial park solution offering modern facilities, reliable sewer, fire protection and potable water supply.
- Utilizing Community Futures and Accelerate North Okanagan to expand the entrepreneurial network.
- Streamlining and reducing delays in bureaucratic approval processes at the municipal level.

7.5.3 Inputs and Services Suppliers

Inputs and services suppliers indicated that the actions required to address limitations and take advantage of opportunities for local agri-development include:

- Leaving the market be to do its job organically.
- Protecting small input and service suppliers from conglomerates.
- Increasing commercialization in the primary sectors to support input and services suppliers.
- Promoting more efficient production systems.

7.5.4 Distributors and Retailers

This grouping indicated that the actions required to address limitations and take advantage of opportunities for local agri-development could include:

- More education of producers about marketing and business realities.
- Working toward a farmer-owned food hub.
- Working toward a community kitchen venue to produce value-added products.

7.5.5 Regional Organizations and Institutions

This grouping indicated that the actions required to address limitations and take advantage of opportunities for local agri-development could include:

- Determining if the agricultural production base can support the scale of any proposed agri-industrial processing.

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[51] Accelerate Okanagan describes itself as an entrepreneurial ecosystem designed to inspire innovation. Programs include mentorship, coaching, training, and networking. https://accelerateokanagan.com/

- Providing retail farm store and storage facilities for farm products.
- New ways of accessing currently unserved markets (colleges, hospitals, care homes) with new products, collaborations, and systems.
- Addressing the regional need for meat processing, dairy processing, and egg grading.
- Addressing other gaps noted re: availability of commercial kitchen, freezer, re-fridge and dry storage, egg grading station, local slaughter, food processing equipment, and food product advice.
- Providing a form of agricultural hub, such as these conceptual options (not mutually exclusive):
    - Food processing Hub - central small-scale processors facility - shared storage, equipment, and management with space for scale-up with bottling, packaging capabilities.
    - Food warehouse hub – more focus on storage and less on processing.
    - Services and collaboration hub - for agri-food developments, advice, mentoring, meeting, shared offices, agricultural centre, agri-tourism programs.
- Encouraging more local leadership and community engagement on ideas of this nature.
- Facilitating the development of a “doer” organization in the region which would be an alliance of like- minded agricultural advocates.

7.6 Other Comments

7.6.1 On-Farm Food Processors

On-farm food processors indicated the following:

- More work is required to make abattoir regulations conducive to short food chain supply systems. However, a meat processing facility needs to compete for livestock and is a difficult enterprise to sustain.
- Did not like idea of dumping milk due to supply chain disruptions. A potential processing opportunity can be in artisan cheese products but also needs to compete in a niche market.
- Competition for land is intense from non-farmers, hobby farmers, dairy, vineyard, and winery developers.
- Need for networking and communication among movers and shakers that will make things happen in the community.
- Governmental decision makers don’t understand the needs of business investors making investments, e.g., time-sensitivity, certainty, and risk.
- Opportunities also present to promote environmental sustainability, resource conservation, and increase land carrying capacity through the conversion of by-products of agriculture and agri-processing, e.g., biogas generation.
- Need a community solution to farm worker housing.
- Promote agri-tourism.

7.6.2 Off-Farm Food Processors

Off-farm food processors indicated the following:

- Food hub model has appeal and cooperative model may have promise.
- Explore community-run business model
- Consider cooperative approach with government and industrial strata approach.
- Lack of land to expand into new opportunities (e.g. adding new products)
- Goal should be to keep families (jobs) at home.

- Using BC interior grown products, makes sense from a sustainability perspective.
- Establish grants with no strings attached.
- Improve ability to use rail, with off-load at Vernon.
- Buy BC branding works.

7.6.3 Inputs and Services Suppliers

Inputs and services suppliers provided other comments:

- Concern about non-agricultural impacts on farmland.
- Concern that agricultural land is being seen as having parkland and recreational purposes.
- Hobbyist non-commercial farming not using as many inputs and services.
- Concern that small hobby farms lack economic sustainability and are the "tail wagging the dog".
- Education and business planning is required for the agricultural sector to survive.
- Services to the livestock sectors are viable and government should not get involved.

7.6.4 Distributors and Retailers

This grouping provided other comments:

- Producers need training/resources to become more efficient.
- Producers need training/resources to develop a more commercial approach to farming.
- Good time for more intensive farming locally.
- Favourable to the idea of an agri-industrial hub.

7.6.5 Regional Organizations and Institutions

This grouping provided the greatest range of other comments:

- Need details of number of acres, servicing, lease or buy rates before feasibility can be assessed.
- Proximity of Southeast Sector to population and highway location are excellent.
- Support for the hub idea, but conversion of ALR lands is problematic for some. Bottom line, land for agriculture is limited in BC and more food needs to be produced locally and people seem to want the land farmed.
- Heightened community interest in food security, local supply, food supply resilience, on-farm food processing, and climate change adaptation.
- Perception of food processing as an agri-industrial use in the ALR is complicated by the trade-offs required and would need to gain support of the farming community to proceed.
- There is the desire to encourage farming and young farmers are interested although currently there is more land available for farming in the area than individuals wishing to farm, in part due to the high cost of land.
- New crops (cherries, grapes) are coming into the area and need a place to be grown. It was indicated that cherries may be a crop opportunity as climate change is allowing for warmer temperatures in the North Okanagan and may fit with a market need.
- Economic model of any food hub idea will be key; co-operative has been tried but didn't succeed.
- Colleges already provide entrepreneurship training and small business advice for free.

8.0 INTERPRETATION OF FINDINGS

8.1 Agricultural Characteristics

A core requirement for a successful initiative to spur the local economy is the presence of the mix and volume of activity to support those initiatives. This agricultural scan confirms the region has an agricultural industry composed primarily of sectors with a strong historical presence of dairy, livestock, and forage crop combinations. As well, various new on-farm enterprises have emerged to produce local fresh food stuffs in response to increasing population, tourism, heightened demand for local fresh food, and regulatory provisions that allow on-farm agri-processing, agri-tourism, and farm-direct marketing. As such, the RDNO, and Spallumcheen in particular, are characterized by traditional agricultural practices interspersed with new farming enterprises, new uses of agricultural land, and competition for resources. Agricultural technology products will help to reduce inputs and connect consumers and producers to create new jobs in rural areas. Emerging food hubs in the province will also help with improving food supply chain entry.

8.2 The Purpose of Agri-Industrial Development can be Complex

Industry creates employment and leads to the retention of family, earnings, and profits in the local economy. In the agricultural context, however, agri-industry can be more complex as it has the potential to:

- Protect and stabilize the primary agricultural land use.
- Provide high quality local food supply and the supply base for exports with technological support (e.g. e-commerce, etc.)
- Provide food security.
- Create community food self-reliance.
- Support other economic drivers such as recreation and tourism.

Local farm product processing, agri-services, and other value-added activities are widely recognized as a way to increase economic viability of the local farming industry. Value-adding also has the potential to take marginally economic small-scale operations over the "hump" towards commercialization, thereby creating a more stable and resilient local food sector. Agri-processing has been identified in the RDNO agricultural plan as an appropriate way to advance the agricultural industry.

8.3 Agri-Processing in the ALR

A key constraint to general industrial development in the RDNO is the lack of available land. A lack of serviced industrial land continues to limit the area's ability to expand and/or attract transportation and warehousing operations that would support trade and exporting opportunities.[52] Many communities are concerned with business retention and expansion as a result of having little or no land to promote for industrial use. In addition, there are specific industrial attraction issues in Spallumcheen related to its readiness to receive investment, including:[53].

- Geographic constraints – current industrial businesses indicated they don't have the required space for expansion, therefore reducing potential for expanding into adjacent properties
- Transportation constraints – limited number of roads and challenging road widths. Specific highway intersections are congested or pose safety hazards. Limited direct rail access.

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[52] Millier Dickinson Blais Inc. 2008. Okanagan Valley Industrial Land Strategy: Final Report. https://lakecountry.civicweb.net/document/36271

[53] Lochaven Consulting. 2020. Business Needs Brief. Prepared for the Township of Spallumcheen.

- Utility related constraints – potable water, hook-up points and costs, in addition to fire suppression, sewer servicing availability, and access to electricity and high-speed internet.
- Township-specific constraints – fire department services, pest control, zoning flexibility, and. Agricultural Land Commission level of support.

Virtually all local governments constrained in agricultural areas are faced with the proposition of using ALR land to support agricultural industry due to a lack of, or suitability of, industrial space. The study area for this feasibility study is in the ALR. Spallumcheen is very familiar with arguments for and against the need for essential agricultural services in the community.

The ALC has a narrow mandate when it comes to determining if a non-farm use of ALR property should occur. The ALC may be ignoring technological advancements and market change needs in food supply chains. Essentially, it comes down to at test of three criteria:

1. Does it preserve agricultural land?

2. Does it encourage farming of land within the agricultural reserve in collaboration with other communities of interest?

3. Does it encourage the Province, local governments, Indigenous communities, and its agents to enable and accommodate farm use of land within the Agricultural Land Reserve and uses compatible with agriculture in their plans, bylaws, and policies?

Information has already been collected for the study area indicating capability for agriculture. The types of agriculture feasible for the location range from forage to vegetables and fruits (especially grapes and cherries). Non-soil-based options could include vegetable greenhouse development. With respect to Criteria No. 1, the taking of agricultural land for agri-industrial purposes will not preserve agricultural land for agriculturally productive purposes.

Use of the study area lands could satisfy Criteria Nos. 2 and 3 by creating support services that:

a) encourage more intensive farming on the remaining land to help reduce inputs and resource use in sustainability and emissions; and

b) protect other ALR land by providing a regional solution for necessary agri-industrial development. So, the argument consists of making a case for a “net-positive” outcome.

To make this case to the Agricultural Land Commission, there are a few considerations that must be reviewed:

4. Can it be demonstrated that the agricultural community supports the proposal? This may depend on which constituencies in the agricultural community are likely to be the benefactors of such development (see section 8.5 below).

5. Can it be shown that the proposal is a regional solution to regional agricultural and food needs?

6. Has the Township considered long-term solutions rather than those that primarily benefit the current landowner or operations (e.g. improvements to the land)? Converting agricultural land to industrial is considered to be a permanent action by the ALC and any benefits proposed to offset this should likewise be permanent in nature.

In trying to assess the feasibility of value-added opportunities in the region, it is necessary to be cognizant of what the farming and small-scale food processing community desires. Unfortunately, no agricultural economic strategy had been developed in the RDNO at the time of writing this report. As such, it is difficult to be specific about what the industrial area might contain. However, the following activities may be viable based on the information collected as part of this study:

- Food processing facilities (for meat, fruits and vegetables, dairy)
- Warehousing that provides dry and cold chain capabilities
- Distribution and staging space
- Community space for networking and education opportunities

- Greenhouse space for vegetables
- Small plots for lease
- Vineyards
- Cherry orchards
- Community gardens
- Retail and wholesaling space for product sales

Based on recent events such as the Minister of Agriculture's attendance at the ribbon-cutting ceremony for the Okanagan Valley Feed Mill site discussed in s. 1.1, there appears to be political support at the provincial level for agri-industry activities. Any lands located in the ALR where agri-industry activities are proposed, however, are subject to ALC approval and should be brought forth to the ALC for endorsement prior to redesignation of the land from Agriculture to Industrial, if necessary. While the above-noted considerations are helpful for any future applicants, it is important to note that any agri-industry activities occurring on ALR lands are subject to ALC approval and it is at the discretion of the ALC to determine if the ALC's mandate to protect and preserve agricultural land is upheld.

The current investigation certainly helps in showing there is interest in the aforementioned activities, but it does not provide a definitive answer. A regional perspective may be more defensible in ensuring that proceeding with one agri-industrial proposition does not lead to an "outbreak" of similar proposals from competing local jurisdictions. The ALC recommends consulting with the RDNO and nearby municipalities, as well as local farm operations, to gauge the level of support for any agri-industrial proposals brought forth.

The Regional Agricultural Advisory Committee demonstrated support in early 2022 for the RDNO to continue efforts to develop an Economic Development Strategy for Agriculture for the North Okanagan. The intent of this strategy will be to increase viability and regional sustainability of agricultural and food sectors, including production, processing, and distribution within the regional food system. This may entail reviewing actions identified in the Regional Agricultural Plan and observing models required to shift to more localized food processing and distribution. At the time of writing this report, development of the strategy had not yet commenced.

8.4 Agri-Industrial Development by/for Whom?

There are several agricultural silos in the RDNO and a number of development scenarios in play. As such, an assessment of the potential feasibility of agri-industrial initiatives depends on which silo(s) is being considered.

8.4.1 Dairy Sector

The dairy sector is supply managed, meaning that the production of milk is strictly regulated in return for guaranteed markets and pricing. Most large dairy farms in the RDNO send their milk to Burnaby for processing. Repatriation of milk processing has gained currency since events that caused milk to be dumped because of disruptions to distribution lines.

Small dairy farmers must also own quota to produce milk and they are required to sell the milk to the BC Milk Marketing Board before they can purchase it back for processing at a markup[54]. No dairy operation may sell unpasteurized milk but it may use raw milk in the production of cheese and other processed products.

The interview survey indicates that there may be some potential for local processing focused on cheese production and yogurts, and this could fit in nicely with the local fruits and berry sectors. However, changes in regulations may be required to make these options feasible. Artisan cheese has been pursued as a means of growing agri-tourism in Quebec and other regions internationally.

[54] Country Life in BC. 2020. Small on-farm dairy processors raise concerns about systemic inequities. https://www.countrylifeinbc.com/small-on-farm-dairy-processors-raise-concerns-about-systemic-inequities/

Source: World Wildlife

Source: The Great Canadian Cheese Festival

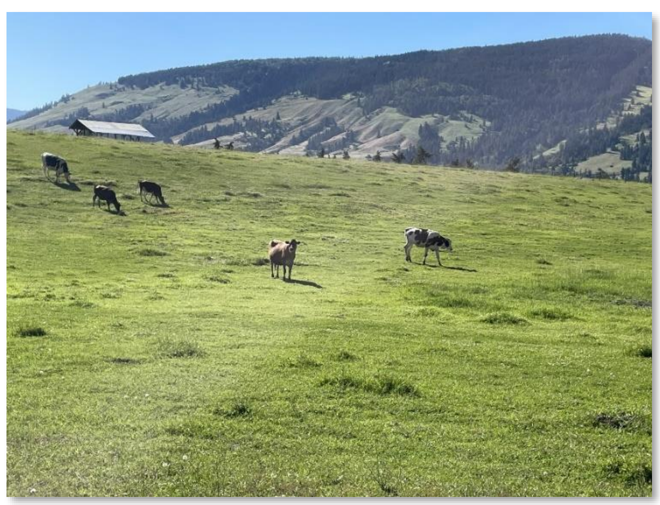
8.4.2 Livestock Sector

The local mainstream livestock sector is a cow-calf enterprise feeding into a Western Canadian beef production industry. The economic direction of the sector is influenced by North American developments in the red meat industry. Transportation and feed costs are important factors in its viability.

The local beef industry is likely to be grass-fed, organic, or natural, focusing on local and BC specialty retail markets. This sector needs local processing capability, and with smaller operations cold chain, butchering, storage capacity, and marketing.

The poultry sector consists of larger meat poultry operators who belong to the poultry supply management system and utilize the large slaughter facilities. Large table egg producers are also supply managed and deliver their eggs to grading stations located out of the region. Marketing is provincial in both instances.

The local cottage meat poultry and egg sectors generally produce organic and natural pastured birds for local markets. The size of the flocks is regulated. These meat operations often face constraints in availability of slaughter facilities. Egg operations with eggs being sold at roadside stands generally do not have grading. This is a limitation to the farmer's ability to grow and enter supply chains.



Source: Township of Spallumcheen

8.4.3 Fruit and Vegetable Sectors

While the fruit and vegetable sectors in the RDNO are energetic, they are also small. So, a question is whether they are currently large enough to support an agri-industrial initiative in the community. If not, can the proposed agri-industrial development be expected to attract acres to create critical mass? If it can, at whose expense? Again, an agricultural economic strategy would reveal the pulse of the community and provide a consensus on tactics to support the agricultural industry. The strategy would also identify funding mechanisms for realizing shared objectives.

Given that the RDNO currently produces about 20% of the protein consumed in the region (both plant- and meat-based), it is a reasonable proposition that there is an accessible market for local food products to be gained through import replacement, new products development, and marketing innovations.

Source: La Casa Cottage Resort

Source: City of Kelowna

8.4.4 Spurring Economic Development Interest

The local agricultural economy is constrained by a lack of adequate processing capability and capacity. Other gaps include local advisory expertise and product development, supply aggregation, and warehousing.

Yet, there appears to be a distinct gap in understanding what the perceived opportunities are, how private investment occurs, and what needs to be done to successfully motivate and spur private sector investment. In addition to strained financial and human resources of local industry players there are other key factors, including:

- Need for reasonable timelines for action.
- Commitment and continuity of purpose from local development agencies within the community.
- Presence of a comprehensive development package, including facilities, equipment, staff, management, and other core service functions.
- Reasonable certainty of obtaining desired outcome(s).
- Predictability about participation costs.

As such, any proposition to pursue initiatives in agri-processing need to respond to these factors. Credibility is enhanced by:

- Engaging major regional employers in economic renewal/development.
- Streamlining the engagement process to facilitate progress, while conserving resources and time.

8.5 Models for Agri-Processing Development

The agri-hub concept resonated with most interview respondents. There were many different ideas about what the hub should contain.

Food hubs are just getting going or are in development in twelve different areas of BC but have a longer development cycle in the United States as a business model. This is fortuitous for Spallumcheen as there is a wealth of information to be gleaned from their experiences. In particular, not all food hubs are the same.

8.5.1 Functions

Some or all of the following functions of an agri-hub were mentioned in the engagement process:

- All respondents identified a need for cold chain continuity and market access to food supply chains.
- Some respondents indicated that the foremost need was for a staging and distribution center for locally grown products.
- Individuals in the local livestock sector identified muti-species slaughter and meat processing as critical functions.
- The community commercial kitchen was regarded as integral to assisting small-scale home processors (bakery, jams, jellies, beverages, etc.) to upscale.
- Providing space for networking, workshops, training, mentoring, and agricultural support services.

8.5.2 Business Model

Several business models were suggested for an agri-hub:

- Farmer-owned facility – it is important to note that the cost of land has been identified as a constraint to this option.
- Community-owned and operated facility, with rented space (e.g., by the month)
- Community-owned strata facility, play and pay with leased space (e.g., by the lease period).
- Municipal-led and managed by a non-profit.

8.5.3 Organization and Funding Model Options

From the research conducted it is clear a gap exists to meet regional agriculture and food processing needs. The four main options to consider in addressing the needs of the region's agricultural industry are as follows:

1. **Status Quo**

Do not respond to the expressed growth needs. Growth of the agricultural sector may be slow as a result. Other regions are doing more and the status quo is not preferred.

2. **ALR Land for Primary Growers**

Rent, lease, or sell ALR land for production of crops, vegetables, orchards, or new crops. The most viable crop enterprise is unknown; however, cherry orchards, wineries, and greenhouse operations may all be commercial-scale enterprises. Sourcing farmers and potential new crop varieties may be best explored with local community groups such as Young Agrarians. This option does not take land out of production and can be the basis for later processing on-site. The land can be leased (for at least 20 years) by local growers and will require water, power, and suitable agronomic conditions. Land rental can provide a small return and over time may see some processing added. This is a feasible option with reasonable potential for early start-up. A greenhouse may be in the order of $1 million or more for a structure spanning an acre of land.

3. **Agri-Food Hub**

Assess the scope and mandate for a fully functioning regional processing and service hub in Spallumcheen. Growth will be accelerated and create new allied opportunities. This is most likely a private-public model.

The food hub facility would operate with shared storage, commercial kitchen and equipment, and management, the need for which were expressed in the engagement phase of this study. Possible product uses include: foods, baked goods, egg grading, food trucks, caterers, and small processors. A food hub would mainly provide a service function that will require provincial, regional, and municipal support, and appropriate certifications. The cost for this type of option will vary depending on the scale and equipment included in the facility. Costs may range from $250,000 per year (operating and some capital for a small effort) to several millions for operating a much more commercial scale facility and associated supports. A business plan is necessary to scope the requirements and funding needs, assess the demand for the services.

The study area in question meets the necessary site criteria for providing an agri-food hub, including required lot area (0.4 to 1.2 hectares or 1 to 3 acres), highway access, water, electricity, and waste management services; however, it is important to note that water supply and access issues were raised as a challenge for farmers in the region throughout the engagement process. The extent of water access available at the study area was not investigated as part of this study. If the study area is selected as the future site of an agri-food hub, it is recommended that proper assessments are undertaken to ensure that water supply is adequate for this use.

4. **Agri-Food Service Centre for Immediate Needs**

This facility option would include advisory and marketing services with some space for storage but no food processing equipment. Some local farms are building facilities on their lands and the gap to be addressed is the joint marketing and storage function. The outcome for growth will be enhanced over the current path and leave the food hub as a potential future option (processing function to be best addressed in a next step phased growth plan). It could mainly be a food warehouse hub with a focus on warehouse space, as well as cold and dry storage. It may include food collaboration space for meetings and workshops and shared rental offices (Land to Table, etc.). It can also provide more focus on commercial and agri-tourism programs. This facility can be a platform for out-of-region growth for small-scale producers who run a batch of product and need storage space while they seek a niche market or sell direct to consumers. A facility will vary in cost but will require several millions for a functioning warehouse facility. A business plan is needed to more fully scope out the centre and demand will need to be assessed.

Similar to a food hub described in option 3, an agri-food service centre may also be located on lands other than those identified as the study area. Such centre would also require approximately 0.4 to 1.2 hectares or 1 to 3 acres of land, highway access, electricity, water, and waste management services.

The use of the ALR lands in the study area for either option (option 3 or 4) will demonstrate that the Township is committed to agriculture industry growth and focusing on expanding local food production through value-add and food processing opportunities. A public- private partnership model can be considered as a way to catalyze the project and the plans.

Some stakeholders that participated in this study indicated that it may be timely for community investment in its own food security. This can be initially demonstrated with some public outreach on this project's findings and moving to action with a new Advisory Committee (include the key allied organizations) to help guide the next steps, build a collaborative network, conduct a business plan, and make other efforts to advance the agri hub project. Expert independent support will likely be needed in the next phase of work. Implementation can follow as the facility and advisory requirements are determined in the business plan phase.

The project has shown that the region lacks supports for increasing local food processing and production, processing, and storage, as well as an integrated plan for further value-adding in spite of the extensive local farm production. The options reviewed above provide an initial starting point for industry comment, validation, and further developments.

Funding for an agri-hub or agri-food service centre poses the largest concern or challenge associated with pursuing options 3 or 4 outlined above, as do how the business model will be governed and operated. It is important to acknowledge that local producers and allied organizations cannot afford the investment required to create such a facility. Nevertheless, there are programs accessible to the Township and agricultural community to offset the cost of exploring the agri-hub proposition in more detail, such as those outlined in Table 11.

The two primary cost categories associated with starting an agri-hub or agri-food centre are:

1. Capital investments – equipment, land, buildings, and structures
2. Operating costs, including management and research and development initiatives

Governance can be a mix of legal models, but non-profits are common for regional agri-hubs and centres. Funders would require a business plan and management model. The required level of investment would vary based on the plan.

Source: Township of Spallumcheen

Table 11: Funding Options for Agri-Hub and Farming Industry Development.

Funding Program	Funding Provider	Project Opportunities	Funding Amount	Funding Recipient	Intake Period	Program Information
Knowledge and Technology Transfer Program – Stream One	Ministry of Agriculture	*Stream One* Farm Business Management Workshop Series – these workshops would provide education opportunities for local farmers to understand how to better manage and grow their business. Resource-sharing and networking would be additional benefits of the series. Potential partnerships may be formed with the Armstrong-Spallumcheen Chamber of Commerce and Community Futures to facilitate the series.	$1,500 Applicants required to demonstrate cost-sharing via cash or in-kind donation	Township of Spallumcheen	Spring 2022 (April) and potentially Fall 2022	https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/programs/knowledge-transfer-events
BC Agri-Business Planning Program – Business Plan Coaching and Specialized Business Planning Streams	Ministry of Agriculture	*Business Plan Coaching* Development of business plans with a business consultant to improve management skills *Specialized Business Planning* Development of business plans that focus on one or more of: business structures, production economics, business strategy, cash flow and financial analysis, value added ventures, risk assessment and mitigation, human resources, and succession/transition planning	Business Plan Coaching: $3,000 Specialized Business Planning: $5,000 for individuals, $20,000 for groups	Producers and food processors with reported farm annual gross revenue < $30,000 (reported to CRA in last two years)	Spring 2022 for February 2023 project completion	https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/programs/agri-business-planning-program
BC Land Matching Program	Ministry of Agriculture, administered by Young Agrarians	Land matching for: • those seeking land to start or expand a business • those looking for someone to farm their land	n/a	Farmers	Ongoing	https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/programs/land-matching

Funding Program	Funding Provider	Project Opportunities	Funding Amount	Funding Recipient	Intake Period	Program Information
Agri-Tech Ramp Up Program	Province of BC	Two-month training program with $500 registration fee that focuses on and entails: • Phase One: Market Validation Training • Phase Two: Mentoring, Coaching, and Networking • Pitch Event to demonstrate learning from the program • $25,000 for top two companies to develop product or technologies and a spot in SFU's Agritech Sandbox program	n/a	Agri-food business organizations focused on primary production with an innovative approach, innovative food products, and agricultural technology entrepreneurs	2022 intake closed – 2023 anticipated to open in October/November	https://agritechrampup.ca/
Organic Infrastructure Program	Province of BC, Government of Canada	Capital project that increases capacity to process organic waste at a facility or by acquiring in-vessel units for a site and processes organic waste for re-use	Up to $2 million to fund up to 2/3 of eligible project costs incurred by March 31, 2024	Township of Spallumcheen	2022 intake closed	https://www2.gov.bc.ca/gov/content/environment/waste-management/food-and-organic-waste/organic-waste-diversion/organics-infrastructure-program/oip-funding-2022
Local Food Infrastructure Fund	Agriculture and Agri-Food Canada	Creation of 2 or more food system components with goal to create or expand community food system. Projects must be infrastructure-specific and demonstrate partnerships amongst community organizations. Examples of infrastructure that could be requested include: greenhouse, gardens, irrigation systems, slaughtering equipment, kitchen equipment, fridges and freezers, composting equipment, etc.	$100k - $500k, in two installments. 75% funding from AAFC and 25% from the applicant or partners	Township of Spallumcheen	June 1 – July 15th 2022	https://agriculture.canada.ca/en/agricultural-programs-and-services/local-food-infrastructure-fund

8.6 Attracting Clients to the Hub

Given the heightened interest in local food supply and regional food self-reliance, this appears to be a good time to encourage agri-industrial opportunities. The community is indicating a desire to support local food and agricultural systems. In addition, community engagement processes indicated an interest in potential opportunities to better promote local agriculture and an agri-industrial hub in particular. Several survey participants were knowledgeable about food hubs in other parts of BC and were speaking with some authority on this topic.

There should be some expectation that hub clients could be recruited from the local agricultural community; however, ALR regulations have created disincentives to more efficient regional solutions to agri-industrial issues. For example, farmers have been allowed to build decentralized on-farm agri-processing facilities while local government proposals to centralize agri-industrial have been rejected. As a result, some farmers have invested too heavily on-farm to consider moving to a centralized facility. At the same time, this evolution has not encouraged collaborative solutions. Second, decentralized facilities are, in sum, likely to be less efficient than well planned, centralized facilities. This has implications for reducing the competitiveness of the industry. Third, on-farm agri-tourism has a general decentralizing effect on the farm economy which is not conducive to streamlining transportation, distribution, and marketing but more likely to contribute to congestion and lack of privacy. Finally, farms with farm-direct sales models are likely not first candidates for expanding to an agri-processing zone.

A further concern is that the current pattern of land use does not seem to respond to the largest opportunities to exploit apparent local demand, raising the issue of community readiness for new initiatives. There may be a need to build inertia to convert to new farming options or other unknown factors that are inhibiting response to market signals. Nevertheless, the potential to draw land use towards local fruit and vegetable production is large but would need a shift in cropping intentions and possibly a change in farm type.

Despite this, Spallumcheen does show characteristics of adaptation to growing the population and increasing local markets. Small holdings are more affordable in the spurring of more small-scale, peri-urban farms catering to the urban consumer. Peri-urban farms are those situated immediately adjacent to large urban centres. In the case of the North Okanagan, this would be the areas immediately surrounding the City of Vernon, including Spallumcheen and Areas B and C. Business models are incorporating transitions to agri-tourism, bed & breakfast offerings, and on-farm recreational opportunities. Some of these pursuits could widen a gulf in the agricultural community between those that are pursuing business focused on selling on-farm experiences and those who wish to produce food. At the same time, small agricultural parcels with lenient qualifications for farm status are highly desired for rural estates, threatening the viability of using those parcels for agriculture.

Keeping these factors in mind, attracting clients to an agri-hub or agri-service centre once funding, partnerships, and coordination are determined may not be challenging, as either option would provide an easier solution for farmers and other agricultural industry stakeholders to expand their existing business or start a new one. A hub or centre would aim to address the existing gaps in the regional industry pertaining to education and facility needs, therefore bridging the gap between what stakeholders need and their current limitations for meeting those needs. Based on the findings of this study, it is likely that the uptake of services offered at an agri-hub or agri-service centre will be high. To ensure success of either facility, it is important that the next steps outlined in section 9 of this report are given high consideration.

9.0 RECOMMENDATIONS

Based on the regional industry stakeholder input received on the various industry needs noted to respond to market trends, it is concluded that more can be done to advance the regional agricultural industry locally in Spallumcheen. The best two options to validate appear to be options 2 and 3 discussed in section 8.5.3 which propose to create an agri-food hub or an agri-service centre. Investment in an agri-food hub option can create new jobs, raise incomes, educate people, and stimulate new products and markets. The benefits will accrue to the region under a long- term strategic model. An agri-food hub does seem feasible (and useful) and will require validation with stakeholders and through subsequent business planning.

The following next steps are recommended:

1.**Assessment** – Formulate one or two industry focus groups comprising of 10-20 potential agri-hub users to assess the possible demand and user requirements of an agri-hub facility based on the findings of this study. The findings can be consolidated into next steps that will provide direction for formulating a business plan. This validation step can be used to advance the concept at the ALC for development of an agri-hub that is proposed on ALR lands. In addition, this step will provide clarity on the catalysts required to crystalize the concept, such as facility needs and potential partners, amongst others At this stage, a review of policies that support agri-industrial development may also be helpful to further justify needs.

2.**Select a Site** – Food hubs typically require 0.4 to 1.2 hectares of 1 to 3 acres of land to allow for a range of agricultural and food users. A site may be selected in or outside of the ALR. If a site is selected in the ALR such as the study area for this study, conversations with the ALC are necessary to address the constraints discussed in section 8.3 of this report, and ALC approval will be required prior to site development. The site best suited for the facility depends on the results of the assessment mentioned in step 1 in terms of industry needs that will be addressed, proximity to the highway, and availability of utilities and infrastructure such as electricity and water.

3. **Determine a Governance Model** - A decision on a governance model will be required (a co-op, non-profit, municipal program, shared local government and non-profit model, etc.) to move forward in formulation of an agri-hub. Local community organizations that may provide support in development of the hub are also important to identify (e.g., Chamber of Commerce, Accelerate Okanagan, Young Agrarians).

4. **Hire a Coordinator** - Contract a qualified professional with experience in regional food hubs that will guide the process and implement the next steps identified in the assessment, including drafting a business plan. This individual will be employed by the sponsor organization that champions this initiative, which may be a non-profit organization or local government (Township or Regional District).

5. **Draft a Business Plan** - Once the scope of the proposed land use is clarified by the user group and if applicable, the ALC, a draft business plan is needed to detail demand, pricing, financial needs, management, and facility scope/ programs. Other items to address in the plan include competition (e.g., local community kitchens, community gardens) and funding programs. A regional approach is most likely to be successful and should include other partners and collaborators.

5. **Community Engagement**– Initiate a communications and engagement process to educate the community on agri-hubs and determine interest for having such a facility in Spallumcheen. The discussion should focus on what community members would like to see at an agri-hub in Spallumcheen and how they may like to interact with the amenity. The Township could host a community logo contest for the facility to generate excitement for the agri-hub.

In addition to the next steps noted above, creation of a Regional Agricultural Economic Development Strategy will further support development of an agri-food hub or agri-service centre. Such a strategy will outline tactics for addressing regional agricultural needs and opportunities, as well as clearly identify stakeholders responsible for, or who may help with, implementation. The Regional District of North Okanagan has identified undertaking a Regional Agricultural Economic Development Strategy as a priority for the short-term and received support from the Regional Agricultural Advisory Committee on this matter in spring 2022.

10.0 CONCLUSION

The gaps identified in the regional agricultural industry observed throughout completion of this study have determined that further development of agri-industry uses in Spallumcheen, including an agri-food hub or an agri-service centre, may be viable. It is important to note that the overall feasibility of such hub or centre cannot be entirely definitive until further assessments are completed, as noted in section 9 of this report. Upon completion of the recommended next steps, more information will be available that outlines the primary focus areas of the hub or service centre and what site characteristics will be necessary to best serve the facility or centre. Overall, it appears that development of an agri-food hub or agri-service centre will provide significant benefits to the regional agricultural community, and further exploration of this concept is encouraged.

APPENDIX A:
STATISTICS

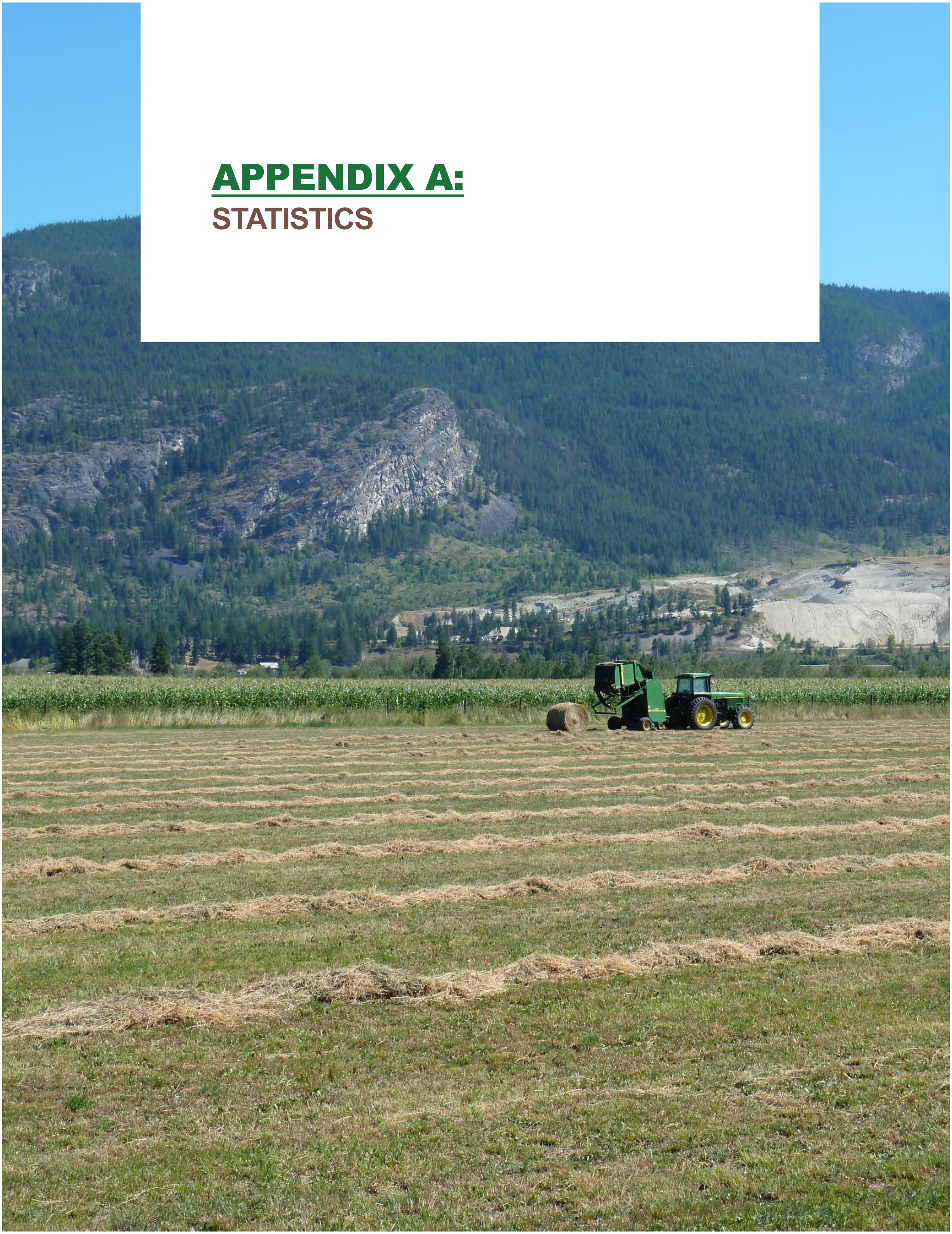


Table 1: Population of the North Okanagan Regional District by Electoral Area

Community	Local Government Classification	Population Estimates 2021 '(1)	Population Percent	Land Base (Acres)
Armstrong	City	5,323	5.8%	1,282
Coldstream	District municipality	11,171	12.2%	16,618
Enderby	City	3,028	3.3%	1,053
Lumby	Village	2,063	2.2%	1,302
Vernon	City	44,519	48.5%	23,663
North Okanagan B	RDA	3,274	3.6%	120,834
North Okanagan C	RDA	4,511	4.9%	74,379
North Okanagan D	RDA	2,909	3.2%	444,789
North Okanagan E	RDA	1,092	1.2%	642,473
North Okanagan F	RDA	4,362	4.8%	444,789
Enderby 2 (Spatsin)	IR	440	0.5%	5,436
Harris 3 (OIB)	IR	0	0.0%	160
Okanagan (Part) 1 (OIB)	IR	3,244	3.5%	25,457
Okanagan (Part) 1 (OIB)	IR	91	0.1%	x
Otter Lake 2 (OIB)	IR	x	x	62
Priest Valley 6 (OIB)	IR	367	0.4%	83
Salmon River 1 (Splatsin)	IR	x	x	3,954
Swan Lake 4 (OIB)	IR	0	0.0%	80
All IRs	All Irs			35,231
Spallumcheen	Township	5,307	5.8%	63,202
Totals	RDNO	91,701	100.0%	1,869,615

Sources: (1) Statistics Canada. 2021 Census of Population. https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E (2) Statistics Canada 2021 Census of Agriculture. https://www.statcan.gc.ca/en/census-agriculture. Notes: RDA = Regional district electoral area; IR = Indian reserve; OIB = Okanagan Indian Band. https://okib.ca/departments/lands-economic-development; tr. = trace presence.

Table 2: ALR Land Base and Farmed Area of the RDNO by Jurisdiction.

Consolidated Census Subdivision	Census Subdivision	Local Government Classification	Total Land Area	Land in the ALR (1)	As Percent of ALR in RDNO	Land Farmed in 2021 (2)
			Acres	Acres		Acres
North Okanagan B	Coldstream	District municipality	16,618	8,767	5.2%	
	Vernon	City	23,663	5,814	3.4%	
	Area B	RDA	120,834	9,743	5.7%	
	Area C	RDA	74,379	2,753	1.6%	
	Okanagan (Part 1)	IR	25,457	12,790	7.5%	
	Priest's Valley	IR	83	…		
	Total NO Area B		**261,033**	**39,868**	**23.4%**	**49,053**
North Okanagan D	Area D	RDA	444,789	38,692	22.7%	
	Lumby	Village	1,302	121	0.1%	
	Total NO Area D		**446,091**	**38,813**	**22.8%**	**50,524**
North Okanagan E	**North Okanagan E**	**RDA**	**642,473**	**11,975**	**7.0%**	**2,366**
North Okanagan F	Area F	RDA	444,789	25,341	14.9%	
	Enderby	City	1,053	148	0.1%	
	Enderby IR	Splatsin	9,691	…		
	Total NO Area F		**455,533**	**25,489**	**15.0%**	**16,811**
Spallumcheen	Spallumcheen	Township	63,202	32,974	19.4%	35,480
	Armstrong	City	1,282	341	0.2%	
	Total Spallumcheen		**64,485**	**33,315**	**19.6%**	**35,480**
	Outside legal parcels (3)	RDNO	20,769	20,769	12.2%	(included in various RDAs, as appropriate)
	Totals	**RDNO**	**1,444,293**	**170,228**	**100.0%**	**154,234**
	Sources: (1) BC Ministry of Agriculture. 2016. Regional District of North Okanagan: Agricultural Land Use Inventory Summer 2013-2014. Ref. No.: 800.510-40.2014. https://www2.gov.bc.ca › rdno2014_aluireport (2) Statistics Canada 2021 Census of Agriculture. https://www.statcan.gc.ca/en/census-agriculture. (3) This refers to legally surveyed parcels in rights-of-way, water, or unsurveyed Crown land. Notes: RDA = Regional district electoral area; IR = Indian reserve.					

Table 3: Farm Types in the RDNO

	2011		2016		2021		Percent Change 2011 to 2021	Percent Change 2016 to 2021
	Number	Percent	Number	Percent	Number	Percent		
Total number of farms	1,167		1,039		972		-16.7%	-6.4%
Beef cattle ranching and farming, including feedlots [112110]	163	14.0%	155	14.9%	140	14.4%	-14.1%	-9.7%
Dairy cattle and milk production [112120]	57	4.9%	56	5.4%	53	5.5%	-7.0%	-5.4%
Hog and pig farming [1122]	1	0.1%	4	0.4%	2	0.2%	100.0%	-50.0%
Poultry and egg production [1123]	69	5.9%	66	6.4%	92	9.5%	33.3%	39.4%
Sheep and goat farming [1124]	33	2.8%	24	2.3%	38	3.9%	15.2%	58.3%
Other animal production [1129]	285	24.4%	239	23.0%	142	14.6%	-50.2%	-40.6%
Apiculture [112910]	15	1.3%	19	1.8%	22	2.3%	46.7%	15.8%
Oilseed and grain farming [1111]	24	2.1%	25	2.4%	31	3.2%	29.2%	24.0%
Vegetable and melon farming [1112]	51	4.4%	53	5.1%	67	6.9%	31.4%	26.4%
Fruit and tree nut farming [1113]	96	8.2%	116	11.2%	96	9.9%	0.0%	-17.2%
Greenhouse, nursery and floriculture production [1114]	51	4.4%	45	4.3%	37	3.8%	-27.5%	-17.8%
Hay farming [111940]	304	26.0%	207	19.9%	223	22.9%	-26.6%	7.7%
Fruit and vegetable combination farming [111993]	7	0.6%	10	1.0%	11	1.1%	57.1%	10.0%
All other miscellaneous crop farming [111999]	11	0.9%	20	1.9%	18	1.9%	63.6%	-10.0%

Table 4: Farm Types in Spallumcheen Census Consolidated Subdivision (CCS)

	2011		2016		2021		Percent Change 2011 to 2021	Percent Change 2016 to 2021
	Number	Percent	Number	Percent	Number	Percent		
Total number of farms	373		371		357		-4.3%	-3.8%
Beef cattle ranching and farming, including feedlots [112110]	41	11.0%	48	12.9%	35	9.8%	-14.6%	-27.1%
Dairy cattle and milk production [112120]	19	5.1%	19	5.1%	21	5.9%	10.5%	10.5%
Hog and pig farming [1122]	0	0.0%	3	0.8%	0	0.0%	---	-100.0%
Poultry and egg production [1123]	37	9.9%	40	10.8%	55	15.4%	48.6%	37.5%
Sheep and goat farming [1124]	16	4.3%	10	2.7%	10	2.8%	-37.5%	0.0%
Other animal production [1129]	82	22.0%	77	20.8%	46	12.9%	-43.9%	-40.3%
Apiculture [112910]	5	1.3%	7	1.9%	9	2.5%	80.0%	28.6%
Oilseed and grain farming [1111]	13	3.5%	20	5.4%	18	5.0%	38.5%	-10.0%
Vegetable and melon farming [1112]	17	4.6%	22	5.9%	26	7.3%	52.9%	18.2%
Fruit and tree nut farming [1113]	11	2.9%	16	4.3%	17	4.8%	54.5%	6.3%
Greenhouse, nursery and floriculture production [1114]	12	3.2%	12	3.2%	12	3.4%	0.0%	0.0%
Hay farming [111940]	110	29.5%	82	22.1%	101	28.3%	-8.2%	23.2%
Fruit and vegetable combination farming [111993]	2	0.5%	3	0.8%	3	0.8%	50.0%	0.0%
All other miscellaneous crop farming [111999]	8	2.1%	12	3.2%	4	1.1%	-50.0%	-66.7%

Table 5: Comparison of Agricultural Land Use in BC, TOCAR and RDNO, 2021

Land Use	BC (acres)	TOCAR as % of BC	RDNO as % of BC
Natural land for pasture	3,079,037	41.8%	2.6%
Land in crops (excluding Christmas tree area)	1,376,399	13.5%	3.5%
Woodlands and wetlands	543,412	29.6%	2.5%
Tame or seeded pasture	439,096	9.1%	1.2%
All other land	194,894	17.9%	3.3%
Summerfallow land	12,179	5.6%	1.9%
Christmas trees grown for sale	3,143	24.2%	0.0%
Total farmland	5,648,160	30.3%	2.7%
Source: Statistics Canada. 2021. Table 32-10-0249-01 Land use, Census of Agriculture, 2021 DOI: https://doi.org/10.25318/3210024901-eng TOCAR = Thompson-Okanagan Census Agricultural Region, RDNO = North Okanagan Census Division / Regional District of North Okanagan			

Table 6: Changes in Land Uses and Agricultural Area, 2011 to 2021

Land Use	RDNO 2011	Percent	RDNO 2016	Percent	RDNO 2021	Percent	Percent Change 2011 to 2021	Percent Change 2016 to 2021
Natural land for pasture	107,675	51.7%	123,997	61.7%	80,057	51.9%	-25.6%	-35.4%
Land in crops (excluding Christmas tree area)	51,900	24.9%	47,868	23.8%	48,596	31.5%	-6.4%	1.5%
Woodlands & wetlands	28,101	13.5%	14,242	7.1%	13,506	8.8%	-51.9%	-5.2%
Tame or seeded pasture	12,295	5.9%	7,938	3.9%	5,389	3.5%	-56.2%	-32.1%
All other land	7,686	3.7%	6,602	3.3%	6,391	4.1%	-16.8%	-3.2%
Summerfallow land	688	0.3%	209	0.1%	235	0.2%	-65.8%	12.4%
Christmas trees for sale	62	0.0%	129	0.1%	60	0.0%	-3.2%	-53.5%
Total farmland (acres)	208,407		200,985		154,234		-26.0%	-23.3%
Sources: Statistics Canada. 2021. Table 32-10-0249-01 Land use, Census of Agriculture, 2021. DOI: https://doi.org/10.25318/3210024901-eng https://www.statcan.gc.ca/en/ca2016 Notes: TOCAR = Thompson-Okanagan Census Agricultural Region, RDNO = North Okanagan Census Division / Regional District of North Okanagan.								

Table 7: Breakout of the North Okanagan CD by Agricultural Land Use by CCS, 2021

Census Consolidated Subdivision (CCS)	Land Use Category								CCS as % of RDNO
	Land in crops	Summer-fallow	Tame & seeded pasture	Natural land for pasture	Woodlands & wetlands	All other land	Land use not specified	Total	
	Acres								
North Okanagan B	4,790	96	x	40,657	2,025	x	1,485	49,053	31.8%
North Okanagan D	10,670	18	2,089	31,193	4,826	1,728	0	50,524	32.8%
North Okanagan E	863	4	x	x	703	x	796	2,366	1.5%
Spallumcheen	22,696	80	1,667	5,131	3,213	2,693	0	35,480	23.0%
North Okanagan F	9,577	37	x	x	2,739	1,109	3,349	16,811	10.9%
Not specified	0	0	1,633	3,076	0	861			
Total RDNO	48,596	235	5,389	80,057	13,506	6,391	60	154,234	100.0%
Land Use as % of RDNO	31.5%	0.2%	3.5%	51.9%	8.8%	4.1%		100.0%	
Source: Statistics Canada. 2021 Agriculture Census. https://www.statcan.gc.ca/en/census-agriculture Notes: x= data too unreliable to be published.									

Table 8: Breakout of the North Okanagan Agricultural Land Use by CCS, 2021

Census Consolidated Subdivision (CCS)	Land Use Category						
	Land in crops	Summer-fallow	Tame & seeded pasture	Natural land for pasture	Woodlands & wetlands	All other land	Total acres
	CCS as % of Land Use Type						
North Okanagan B	9.90%	40.90%	x	50.80%	15.00%	x	49,053
North Okanagan D	22.00%	x	38.80%	39.00%	35.70%	27.00%	50,524
North Okanagan E	1.80%	x	x	x	5.20%	x	2,366
Spallumcheen	46.70%	34.00%	30.90%	x	23.80%	42.10%	35,480
North Okanagan F	19.70%	15.70%	x	x	20.30%	17.40%	16,811
Not specified	0.00%	9.40%	30.30%	10.30%	0	13.50%	0
Total RDNO	48,596	235	5,389	80,057	13,506	6,391	154,234

Source: Statistics Canada 2016 Census of Agriculture. https://www.statcan.gc.ca/en/ca2016

Notes: x= suppressed for confidentiality reasons.

Table 9: Land in Agricultural Crops, RDNO - 2011, 2016, and 2021

Crop	2011 Acres	Percent	2016 Acres	Percent	2021 Acres	Percent	% Change 2011 to 2021	% Change 2016 to 2021
Alfalfa, mixtures, & tame hay	36,886	71.1%	31,035	64.8%	32,792	67.5%	-11.1%	5.7%
Corn for grain /silage	5,875	11.3%	7,937	16.6%	7,698	15.8%	31.0%	-3.0%
Cereal grains	6,394	12.3%	5,181	10.8%	5,816	12.0%	-9.0%	12.3%
Fruits, berries, and nuts	1,192	2.3%	1,670	3.5%	1,164	2.4%	-2.3%	-30.3%
Canola	x	---	603	1.3%	x	---	---	---
Vegetables	429	0.8%	416	0.9%	330	0.7%	-23.1%	-20.7%
Nursery	370	0.7%	x	---	x	---	---	---
Potatoes	73	0.1%	25	0.1%	x	---	---	---
Not specified	681	1.3%	1,001	2.1%	796	1.6%	16.9%	-20.5%
Total	51,900	100.0%	47,868	100.0%	48,596	100.0%	-6.4%	1.5%

Sources: Statistics Canada. Agricultural Census. https://www.statcan.gc.ca/en/ca2016 Notes: x= data too unreliable to be published (2021) or data suppressed to meet confidentiality requirements of the Statistics Act.

Table 10: Breakout of the North Okanagan Agricultural Crops by CCS (Land), 2021

Crop	Census Consolidated Subdivision						RDNO	
	North Okanagan B	North Okanagan D	North Okanagan E	North Okanagan F	Spallumcheen	Location not specified	Total Acres	Crop as % of RDNO crop land
	Acres							
Cereal grains	x	863	x	79	3,605	1,269	5,816	12.0%
Corn - silage/grain	x	403	0	2,050	4,785	460	7,698	15.8%
Alfalfa/ tame hay	1,325	9,266	1,834	6,784	13,583	0	32,792	67.5%
Potatoes	x	x	0	x	x	0	x	
All other field crops	x	x	x	x	x	0	443	0.9%
Fruits	1,051	x	x	x	x	113	1,164	2.4%
Vegetables	107	x	x	56	150	17	330	0.7%
Nursery	x	x	x	x	239	0	x	
Not specified	2,307	138	863	608	334	0	353	0.7%
Total crops	4,790	10,670	2,697	9,577	22,696	0	48,596	100.0%

Source: Statistics Canada. 2021 Agriculture Census. https://www.statcan.gc.ca/en/census-agriculture Notes: x= data too unreliable to be published.

Table 11: Breakout of the North Okanagan Agricultural Crops by CCS as % of Crop Category

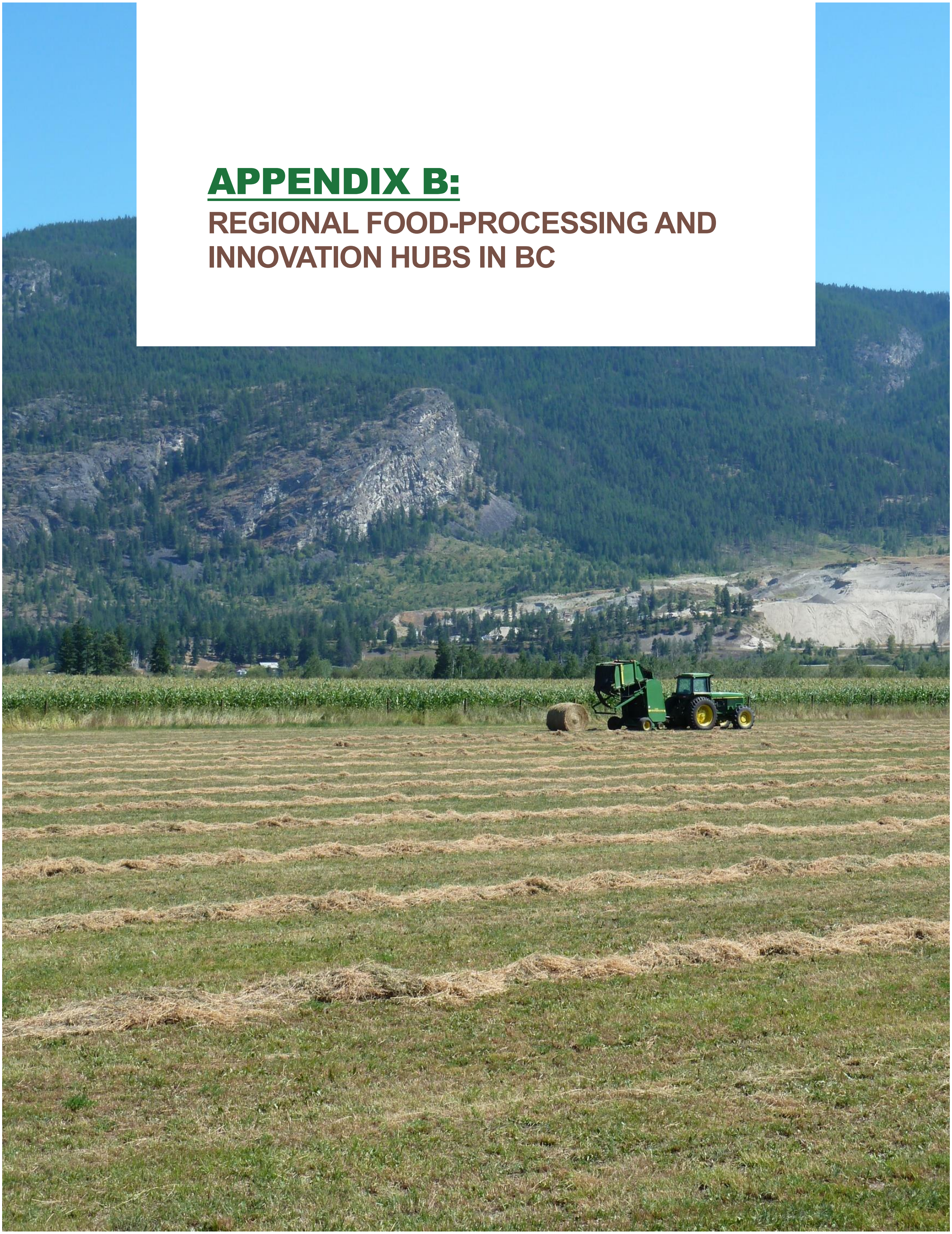
Crop	Census Consolidated Subdivision						RDNO	
	North Okanagan B	North Okanagan D	North Okanagan E	North Okanagan F	Spallumcheen	Location not specified	Total	Crop as % of RDNO crop land
	CCS as % of Crop Category							
Cereal grains	x	14.8%	x	1.4%	62.0%	21.8%	5,816	12.0%
Corn - silage/grain	x	5.2%	x	26.6%	62.2%	6.0%	7,698	15.8%
Alfalfa/tame hay	4.0%	28.3%	5.6%	20.7%	41.4%	0.0%	32,792	67.5%
Potatoes	x	x	0	x	x	0	x	x
All other field crops	x	x	x	x	x	0	443	0.9%
Fruits	90.3%	x	x	x	x	9.7%	1,164	2.4%
Vegetables	32.4%	x	x	17.0%	45.5%	5.2%	330	0.7%
Nursery	x	x	x	x	239	0	x	x
Crop not specified	x	x	x	x	x	0	353	0.7%
Total crops	4,790	10,670	863	9,577	22,696	0	48,596	100.0%
Source: Statistics Canada. 2021 Agriculture Census. https://www.statcan.gc.ca/en/census-agriculture Notes: x= data too unreliable to be published.								

Table 12. Poultry Production in the RDNO by CCS, 2021

Poultry Production	Units	North Okanagan B	North Okanagan D	North Okanagan E	North Okanagan F	Spallumcheen	Location not specified	RDNO
Table eggs/dozen	Dozen	34,449	11,557	4,277	15,192	271,845	0	337,320
Broiler, roaster & Cornish/kgs	Kilograms	10,427	1,000,351	390,855	1,985,863	13,211,279	0	16,598,775
Turkey/kgs	Kilograms	x	X	x	x	4,665	0	x
Source: Statistics Canada. 2021 Agriculture Census. https://www.statcan.gc.ca/en/census-agriculture Notes: x= data too unreliable to be published.								

APPENDIX B:

REGIONAL FOOD-PROCESSING AND INNOVATION HUBS IN BC



Through the BC Food Hub Network, there are currently regional food processing and innovation hubs ('food hubs') operating or under development in twelve communities in British Columbia[55], discussed below The Province is providing $11.6 million over a five-year period (2018/19 – 2022/23) to develop this network.

Centre for Seafood Innovation, Bowser
The Centre for Seafood Innovation, led by Vancouver Island University (VIU), offers seafood businesses commercial culinary kitchen, event and training space. The centre offers applied R&D, and business development services to address seafood sector challenges and opportunities. As part of VIU, the centre accesses the research, science and technology, social sciences, culinary, and management expertise needed for innovation. It opened in 2021.

Commissary Connect, Vancouver
Commissary Connect opened in February 2019 and is located on Laurel Street in Vancouver. Commissary Connect operates the BC Food Hub Network's pilot and demonstration site, The facility is open 24/7 and provides local processors with access to a HACCP-ready facility. The project received $750,000 over a 3-year period from the Province.

Cowichan Farm & Food Hub, Cowichan Valley
Cowichan Farm & Food Hub, led by the Cowichan Green Community Society, will offer a commercial teaching and processing kitchen, as well as an aggregation space for local food producers and processors. The facility will be opening sometime in 2022.

The Dock+, Port Alberni
The Dock+, led by the Port Alberni Port Authority, opened in July 2020. The facility serves shellfish, finfish, and seaweed and offers commercial kitchen space for terrestrial processors on Vancouver Island. The facility received $750,000 in funding from the Province. In addition, the Port contributed $500,000 and the Coastal Economic Trust contributed $350,000.

Fraser Valley Artisans Food Hub, Abbotsford
Fraser Valley Artisans Food Hub, led by the Mission Community Skills Centre Society, will offer shared kitchen space for food processing and commercial production and customized training programs for the food sector. It is anticipated to open in 2022.

Kitchen Connect, Victoria
Kitchen Connect, led by the Victoria Community Food Hub Society, will offer a shared processing and packaging facility and aggregation space to local processors and producers. It is anticipated to open in 2022.

Kootenay Boundary Food Hub, Rock Creek and Greenwood
Kootenay Boundary Food Hub, led by the West Boundary Community Services Co-op Association, will offer a co-packing and processing kitchen to meat producers in Rock Creek and a bakery test kitchen to processors in Greenwood. The hub opened in 2021.

Kootenay Farms Food Hub and Innovation Centre, Creston
Kootenay Farms Food Hub and Innovation Centre, led by Fields Forward, offers co-packing space, shared-use food packaging space, storage facilities and wet and dry processing equipment to local producers and processors. The hub received $800,000 over a three-year period from Stronger BC Economic Recovery Plan. In addition, the Columbia Basin Trust contributed $150,000 to renovate a facility, purchase equipment, and cover staff positions for two years.

[55] Source: https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/growbc-feedbc-buybc/feed-bc-and-the-bc-food-hub-network/bc-food-hub-network/regional-food-processing-and-innovation-hubs-in-bc

Plenty & Grace, Surrey
Plenty & Grace Food Hub & Innovation Centre opened in July 2020. Located in Surrey, the hub serves Fraser Valley plant-based food processors.

Sprout Kitchen, Quesnel
Sprout Kitchen Regional Food Hub and Business Incubator (Sprout Kitchen), led by the City of Quesnel, recently opened. The hub offers regional food and agriculture businesses access to a shared commercial kitchen, specialty food processing equipment, cooler and freezer storage, and co-packing services. In 2022, Sprout Kitchen will be setting up a lab for food safety testing and a regional distribution network. The facility received $500,000 from the Province.

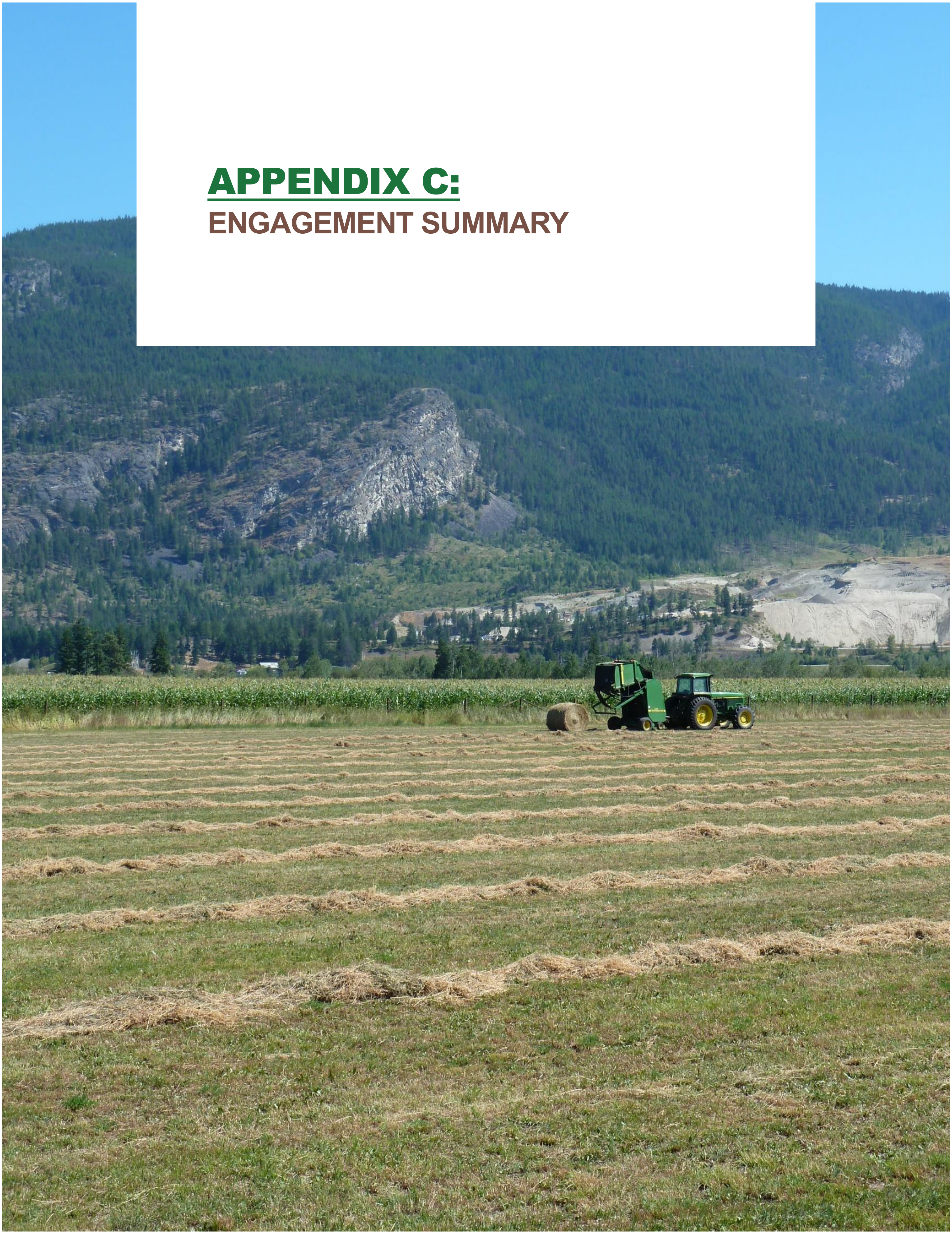
The Stir, Kamloops
The Stir, led by the Kamloops Food Policy Council, provides kitchen facility rentals, business mentorship, and community support to help local food entrepreneurs start and scale-up their business to reach a wider market. The Stir specializes in canning and dehydration and offers – specialty food processing and packaging equipment, dry and cold storage, warehouse space, as well as a retail store and pop-up event space. Kitchen rentals are currently available through The Stir's partner facilities in Kamloops and The Stir Food Processing and Innovation Centre. The retail Stir front opened in the spring of 2022.

Zest Commercial Food Hub, Salmon Arm
Zest Commercial Food Hub, led by the Salmon Arm Economic Development Society, offers regional food and agriculture businesses access to shared food and beverage processing space, equipment and services.

A total of $465,000 in funding under the BC Food Hub Network program has been provided to organizations across the province for the completion of food hub feasibility study and business planning projects:

1. Capital Region Food and Agriculture Initiatives Roundtable, Victoria (2019/2020)
2. City of Quesnel, Quesnel (2018/2019)
3. City of Salmon Arm, Shuswap Region (2019/2020 & 2020/21)
4. Columbia Basin Trust, Columbia Basin (2018/2019)
5. District of Summerland, Summerland (2018/2019)
6. Good to Grow Natural Products Coaching (partnering with the British Columbia Institute of Technology), North Vancouver (2019/2020)
7. Kamloops Food Policy Council, Kamloops (2019/2020)
8. North Island College, Courtenay (2019/2020)
9. Upper Skeena Development Centre Society, Hazelton (2019/2020)
10. Vancouver Island University, Deep Bay/Nanaimo (2018/2019 & 2019/2020)

APPENDIX C:
ENGAGEMENT SUMMARY



What We Heard

South Spallumcheen Industrial Area Agri-Hub Feasibility Study

March 21st, 2022

TABLE OF CONTENTS

Prepared by:

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304-1353 Ellis Street
Kelowna, BC V1Y 1Z9

1. INTRODUCTION

The Township of Spallumcheen is undertaking an Agri-Hub Feasibility Study for the South Spallumcheen Industrial Area. Funding for this study is provided from the federal and provincial governments through a grant program administered by the Investment Agriculture Foundation of BC. The study aims to determine if agri-industry uses can be supported in the study area.

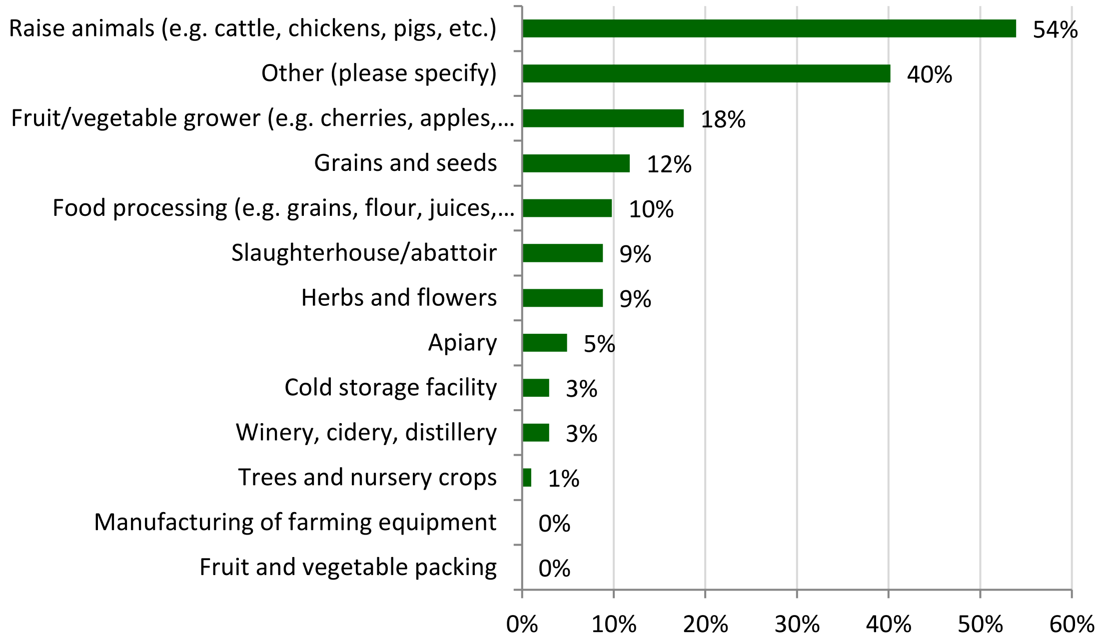
DELIVERED BY:

FUNDING PROVIDED BY:

A survey was distributed to 74 regional agricultural stakeholders and posted on the Township's website between November 22nd and December 19th, 2021 which received a total of 29 responses. To capture a higher response rate, the survey was reopened from January 24th to March 8th, 2022. This version of the survey was widely distributed to stakeholders and the public through multiple channels and collected an additional 68 online responses and 5 hard copy responses. In total, the survey received 102 responses. This report provides a summary of "What We Heard" from the online survey and hard copy survey respondents. Verbatim comments are provided in Appendix A.

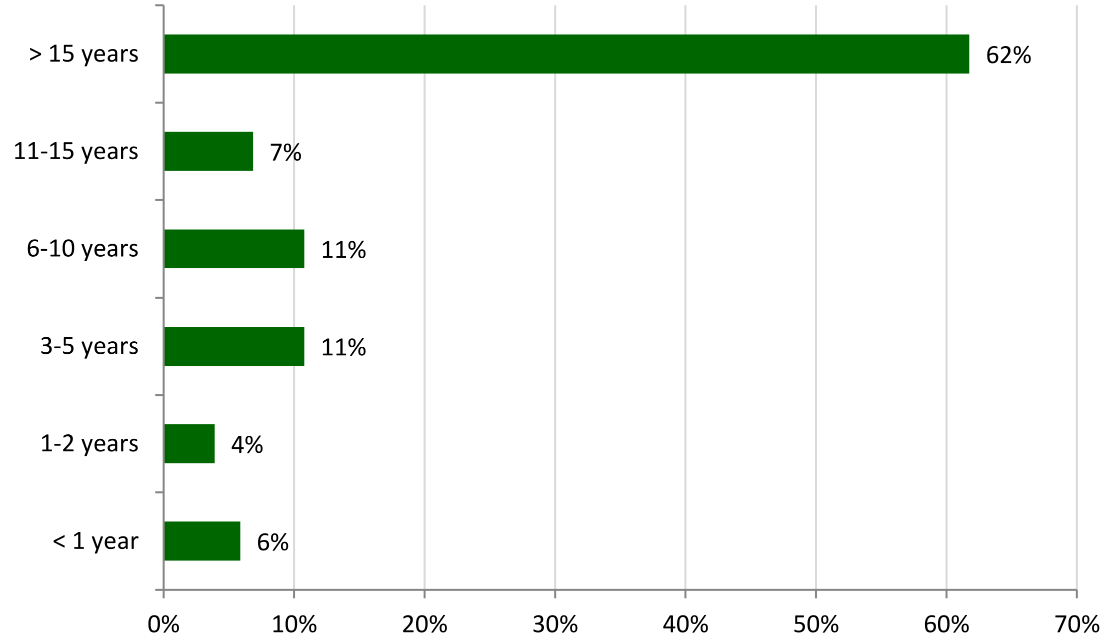
2. SURVEY RESULTS

Question 1: What is your connection to the Spallumcheen agricultural community? Please select all that apply.



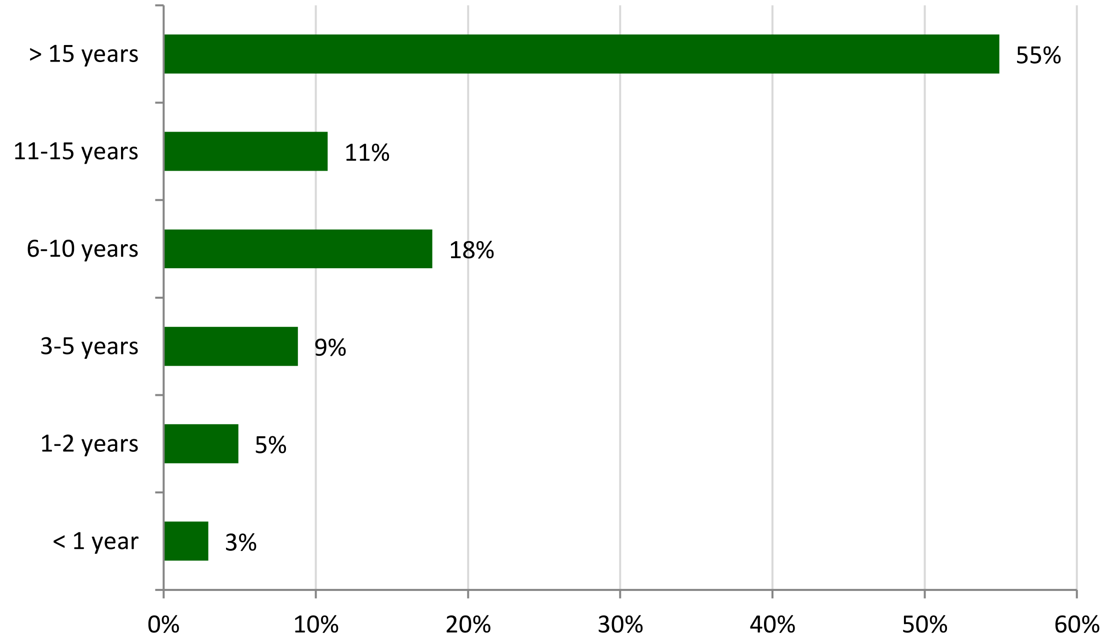
Approximately half of the respondents' (**54%**) connection to the Spallumcheen agricultural community is through raising animals. Examples of 'other' responses include hay producers, dairy farmers, grocery retailers, and local government representatives.

Question 2: How many years have you had ties to the Spallumcheen community as a resident and/or business owner?



Sixty-two percent (**62%**) of respondents indicated that they have had ties to the Spallumcheen community for more than 15 years, while ten percent (**10%**) indicated that they have had less than 3 years of involvement with the community.

Question 3: How many years have you been involved in the agriculture industry (within Spallumcheen and/or another community)?



More than half of respondents (**55%**) indicated that the have been involved in the agriculture industry for more than 15 years, while eight percent (**8%**) indicated that they have been involved for less than 3 years.

Question 4: What are the top three challenges you currently experience as a member of the agricultural community, or see others experiencing?

The recurring top challenges identified amongst respondents include a lack of access to local processing facilities, land cost/availability, operations and supply costs, natural disasters and climate change, and access to water. Other challenges identified include regulations and restrictions, labour and supply shortages, consumer access to locally produced food, and lack of sustainability initiatives.

A sample of the verbatim comments are provided below:

- *Large parcels being separated into smaller parcels which is reducing our ability to purchase reasonably priced acreages*
- *Economic viability of farming*
- *Cost of land is far beyond the reach of many who would like to get involved in the agri industry*
- *Commodity prices inadequate to cover costs*
- *Access to water for crops*
- *There aren't enough meat processors to process everything from Pork to poultry to wild game.*
- *Lack of closed loop local food. Ie Locally grown grain/hay, meat and sold local*
- *Restrictions on development of marginal/non-arable farmland*
- *Climate change - more weather extremes, and frequency of extreme events*
- *Finding casual manual labour*
- *No local dairy processing which created tragic waste of product when highways were closed due to fires and flooding and winter weather*
- *No realistic options for sustainable energy sources*
- *Slaughtering/processing animals and on a small scale is very difficult - long wait times*

Question 5: What is needed to address the challenges identified in your response to the previous question (Q4)?

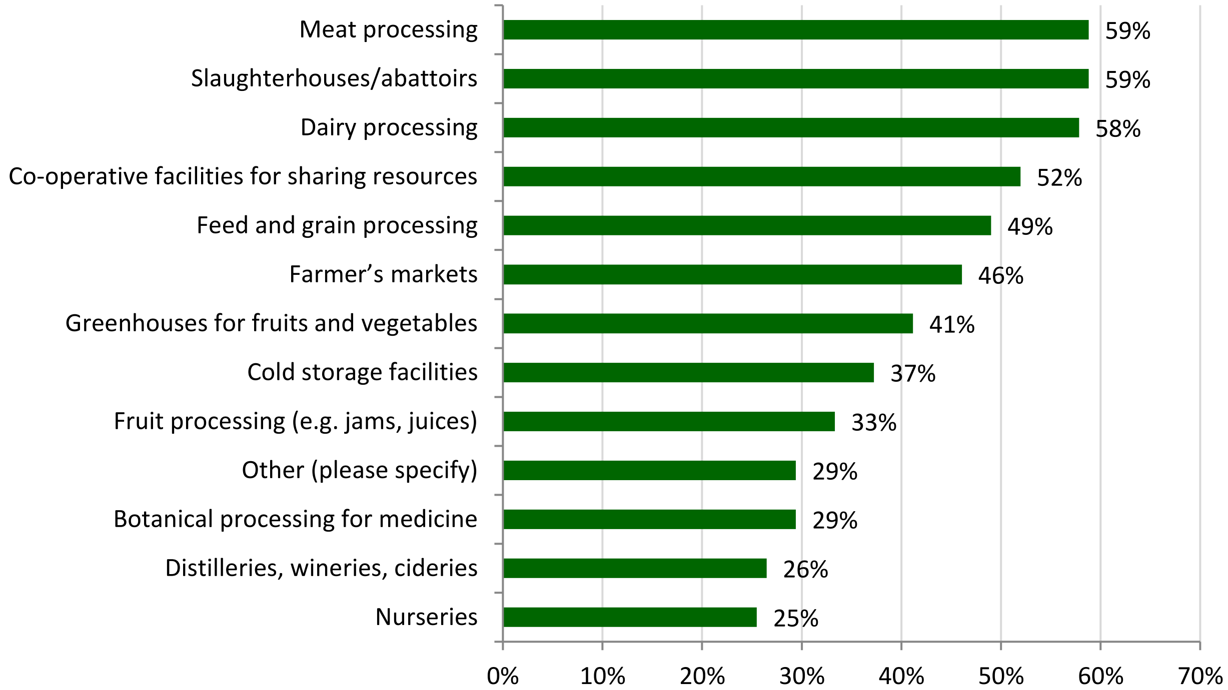
Many respondents indicated that they would like to see more local processing facilities in the area such as abattoirs, dairy processing, and greenhouses, as well as government policies and regulations that address climate change and support local farmers. Respondents would also like to see decreased regulations from the provincial government, taxes on agricultural properties that are not agriculturally active, and increased incentives to buy local.

A sample of the verbatim comments are provided below:

- *...I'd love to have access to leased greenhouse space, so I can scale up vegetable seedlings for our farm and to sell to nurseries. We don't have access to natural gas, and several other factors make it inefficient for us to build our own single greenhouse. I think there would be cost efficiencies having shared facilities leased to farmers...*

- *Possible shared processing facilities for local producers.*
- *Relaxing regulations for specific scenarios that would facilitate growth in the small producer segment.*
- *… place to link skilled manual labour and farmers needing help.*
- *Farmers of all sizes need alternative markets for the sale of their products, choice where to purchase goods and services, and healthy competition to ensure fair pricing for both the sales of their products and the purchase of ag consumables needed to successfully.*
- *More investment into farming in our area.*
- *The words, the rich get richer and the poor get poorer, come to mind. You have one producer who is purchasing up all the land, driving up prices, who pollutes the water table and nothing appears to happen to them. Then you have the producer trying to eke out a living on 10 acres of land but cannot because of all the taxes they have to pay. There needs to be a better assessment process in place to differentiate between commercial and backyard production.*
- *Support climate action! Ie: Plant trees, create wetlands, capture carbon, encourage growing gardens, Tax polluters, Any New building s must be LEED compliant and have significant amounts of trees planted.*
- *… ensuring that property taxes are much higher for farmland that is not being farmed, and continuing to regulate the size/number of houses that can be built on farmland…*
- *… More slaughter capacity for small-scale producers in the area. Existing facilities are completely booked a year in advance.*
- *Funding and working together as a community to be sustainable.*
- *Practical approach to individual needs (housing) and support for all industries including abattoirs to allow meat production to be feasible.*

Question 6: What opportunities for agricultural industry expansion outlined in the list below are most viable for Spallumcheen? Please select all that apply.



A high level of support was shown for meat processing (**59%**), slaughterhouses/abattoirs (**59%**), and dairy processing (**58%**) as viable opportunities for agricultural industry expansion in Spallumcheen. Approximately half of respondents also believe co-operative facilities for sharing resources (**52%**) and feed and grain processing facilities (**49%**) are viable. Those who selected "Other (please specify)" frequently noted that they would like to see livestock, equipment, and farm product auctions in the community.

Question 7: What is your vision for the agricultural industry's future in Spallumcheen?

One recurring theme among the responses was the desire to see local produce on grocery store shelves and an increase of local food product consumption within Spallumcheen in general; this would be part of a general increase in self-sufficiency for the province especially in light of recent natural disaster events causing strains on transportation infrastructure (e.g. wildfires, floods). Respondents also would like to see more shared facilities, increased support for smaller scale producers, a rise in agritourism activity, and an increased push towards climate change adaptation.

A sample of the verbatim comments are provided below:

- *Supporting small to mid-range producers through practical infrastructure and learning opportunities*
- *… Food grown here is also processed and consumed here with excess exported to other regional markets…*
- *More agri-tourism to raise awareness of regenerative agriculture.*

- *...there is a need for processing. Sharing a facility would help a lot of people.*
- *A way to combat some of our emissions and work towards solutions for climate change, a chance to be resilient when disasters like flooding and fire strikes.*
- *Support for small agricultural business who supply food and services locally. Long term planning that preserves our natural resources and considers the effects to the environment.*

Question 8: What is your rationale for choosing to operate an agricultural business in Spallumcheen?

Overall, respondents expressed an appreciation for the beauty of the Spallumcheen area, the close-knit community, and affordability of the area. In addition, the good soil and climate were also beneficial factors; the location is rural but not remote as there are many other communities nearby and good access to transportation infrastructure. Many respondents are also simply from the area and have chosen to stay.

A sample of the verbatim comments is provided below:

- *It's my community. I love the people here. I like the weather, and appreciate the fairly long growing season. It's rural, but not remote. It's a beautiful place, and I appreciate the green/wild spaces.*
- *I believe there is a great community here, there is abundant fertile soil, and a potential for us to do real good in providing healthy food to people.*
- *Location-Close proximity to Vernon, Armstrong, Lake-Country, Salmon Arm, Enderby etc. ... Highway Access- Easy access for large trucks, customers, deliveries/shipments etc.*
- *Affordable Industrial property*
- *Beautiful area, friendly people.*

Question 9: Please provide any other comments you may have.

Overall, respondents voiced concern around extreme weather events and climate change and a need for self-sufficient food systems in the interior of BC.

A sample of the verbatim comments is provided below:

- *I would like to see more environmental monitoring in our region to help producers make good choices to ensure the longevity of our farmlands. Encouraging producers and our community to be more conscious and responsive to climate change would help to increase the desirability of the area in more ways than one; as a food destination, a beautiful tourist location, and a community at the forefront of positive change.*
- *Globalization over the last 100 years has meant the end of much local production and prosperity. Climate change and world events encourage more self sufficiency*
- *Buyers are becoming more brand sensitive, with more buying choices being made based on how environmentally focused a business is, supporting local etc. Our region could be self sustainable if we start moving into a long term regenerative mentality.*

APPENDIX A: Verbatim Responses

Question 1: What is your connection to the Spallumcheen agricultural community? Please select all that apply.

Other (please specify) answers:

- Hay crops
- Hobby farming - working towards a small business.
- Dairy farm, forage production
- dairy
- alfalfa
- we grow hay, and sometimes corn
- equestrian business
- Hay
- Hay producer
- No direct connection
- I live desire it
- Pet food producer
- Wholesale Food & Ingredients distributor
- Mushrooms
- Hay sales
- Consumer of anything produced locally
- Dairy farmer
- Corn silage
- Lease approx 200 acres of hayland
- Manage the Grocery store in town, where we take pride in trying to support local farmers
- Not in the aea
- RDNO Director
- Grocery retailer
- Dairy farming
- Grow vegetables
- consult in the industry (business, finance)
- Area "F" Regional Director
- baking and sewing alterations for community
- Regulatory
- Resident
- Resident
- Primary agriculture association, representing tree fruit growers
- Dairy Farm
- local Gov RDNO
- Hay
- Hay, grass
- Cookie baker
- wild edible plants and ethnobotany
- dairy
- Agricultural economist with many clients in the RDNO/CSRD
- Carbon farm offsets and stooling bed materials. With a small pyrolysis operative in two forms to cleanly sequester organic carbon, biochar,

Question 4: What are the top three challenges you currently experience as a member of the agricultural community, or see others experiencing?

Top Challenge:

- With the high cost operation, it does not contribute to cost of living on smaller parcels of land
- Cost of land is far beyond the reach of many who would like to get involved in the agri industry.
- Slaughtering/processing animals and on a small scale is very difficult - long wait times.
- price of land
- Availability of viable sized parcels of land (subdividing of land parcels) - Irrigation
- Water
- Fire mitigation
- access to red meat slaughter
- Lack of processing for production
- DCC tax
- lack of animal slaughter/processing facilities
- getting farm workers
- Meat processing
- Processing our stock
- Lack of abattoirs
- low market prices
- water shortages
- Lack of local slaughter house
- Commodity prices inadequate to cover costs
- Drought
- Diminishing land base to farm
- Space
- provincial goverment
- Infrastructure
- Consistency of feed for livestock
- Red tape
- Extreme weather
- Lack of beef processing capacity
- Flooding along Deep Creek
- Lack of resources
- Access to end consumer market
- Supply costs
- No land available for Growth, in Spallumcheen industrial park
- Worker shortage
- Difficulty finding small abboitoirs amd butchers.
- Price of hay & availability
- Getting milk to the plant
- The effects of the flooding at the coast on farmers
- Water
- Okanagan needs to be able to process a higher volume of milk.
- BC's Well registration
- Weather
- Water

- drought, heat dome,
- Labour
- selling your produce
- farms are unable to produce enough volume for demand
- Weather
- Dairy supply chain issues
- Lack of water for irrigating crops
- decreasing margins
- Viable local produce, proteins to purchase at competetive prices.
- Lack of animal auction house
- Access to water for crops.
- Access to markets
- Getting our animals processed (abattoir)
- distribution
- Lack of processing capacity
- land use restrictions
- Food Secuirty
- pricing for supplies
- Water availability
- Land Prices
- Lack of affordable land
- Processing
- Enviromental impacts to crop production
- Housing restrictions
- No local dairy processing which created tragic waste of product when highways were closed due to fires and flooding and winter weather
- Crop production / organic land available
- Economic viability of farming
- COVID-19 challenges (supply chain)
- Logistics (raw products)
- Product Sales
- Neighbor complaints about farming
- lack of water
- Local feed
- slaughter/cut and wrap
- Regional Agricultural Plan Challenges: financial, administrative, regulatory obstacles in meeting objectives (economic success of agriculture)
- Climate change - more weather extremes, and frequency of extreme events
- Access to red meat processing
- Use of toxic pesticides
- Lack of local processing for eggs and dairy
- Lack of closed loop local food . Ie Locally grown grain/hay , meat and sold local
- Limited water supply
- climate change (ie drought and resulting feed shortages, wildfires)
- Finding a proper certified kitchen, close by.
- local food processing
- Infrastructure shortage
- Cost of land
- Land Prices are too high

- DCC tax
- Lack of slaughter facilities/availability for small-scale producers
- Lack of local value added processing
- Too many provincial restrictions for farmers.
- slaughter house
- Cold storage availability
- Malting barley/wheat not being produced locally
- Water protection,
- lack of availability for livestock processing in inspected abattoirs
- Heavy competition in the floral sector
- Lack of processing

<u>Second Top Challenge:</u>

- Restrictions of kinds of small home based businesses, one is allowed to operate on agricultural land
- Lack of local meat processing
- Dumping milk when store shelves are low on dairy. It is ridiculous when there are so many dairies here. Local milk should be available.
- costs of farming
- Price of land (high)
- Feed prices
- Water resource
- access to poultry processing
- Lack of research and education for crop production
- ALR residential policies
- distances to grain supply center
- selling products locally
- Milk & dairy processing
- Sales of livestock
- Cold storage (small scale) for rent by producers of vegetables
- invasive weeds
- food security
- Competing against the corrupt quota system
- Invasive plant (weed) species
- Cost of equipment
- price of land
- Money
- water licenses
- Shipping
- Urban encroachment on agricultural land
- High government interference
- Competition from big box stores
- Disappearing agricultural land
- Regulations for farm gate sales of meat products
- Labour supply
- Hay shortage
- Not enough small batch food processors
- Aquifer….lack of ground water protection
- Commercial kitchen for processing
- Weather

- Chicken farmers live prices needs to reflect our local feed prices and not that of the east.
- Fuel prices
- Community Support
- tourism drop, pandemic, fires
- Cost
- costs associated with production
- farms pricing is not competitive
- employee sourcing
- Forest Fire evacuation policy
- Local dairy processing
- qualified labour
- Abbatoir
- Shipping milk across the coquihala for processing
- Access to abbatoir space-government inspected
- Climate change (fires/drought)
- workforce
- No local processing
- high cost of farm land
- keeping connected to the community
- weather challenges
- Labour cost
- Government restrictions / taxes
- Year round cold storage
- Long term water access
- Need for abattoir
- No ability for small livestock producers to have their animals slaughtered and processed locally and economically
- Distribution to more populated areas of the province/country
- Restrictions on development of marginal/non-arable farmland
- Power of retailer consolidation and lack coordination of marketing agents
- Rising costs of goods
- Processing & Manufacturing
- complaints about our growth and size
- poor internet
- Local processing of chicken and beef
- Finding casual Manual labour
- need to encourage/support local processing and other value-added opportunities
- Labour shortage
- Access to value added meat processing
- Land values are too high $ to make farming viable
- Limited support from commission, municipality in terms of controlling evasive plant species
- land cost and availability
- Supply shortage
- water shortage
- Land access at reasonable cost for agricultural uses
- Large parcels being separated into smaller parcels which is reducing our ability to purchase reasonably priced acreages
- There aren't enough slaughter services. Particularily Lamb and Poultry
- ALR residential policies

- Lack of marketing/sales venues for products, livestock
- Agricultural inputs are not available locally
- meat processing-small scale
- Abattoir availability
- Water challenges; effluent, sewage, and fresh supply
- water conservation
- Milk processing
- Climate change
- Lack of distribution warehouses

Third Top Challenge:

- Not having access to sewage utility
- Raw milk being illegal. Not being able to sell dairy on a small scale. The quota system needs to go. Small farms are pushed out by legislation and large agribusiness.
- water - we have no access to farm or agricultural water sources
- Houses built on viable land. - Population growth
- Residential encroachment
- farm gate beef
- availability of butcher shops and experienced butchers
- Lack of quality employees in production and support industries
- Environmental procedures
- lack of local dairy processing facilities
- high cost of farmland
- Basically all avenues of processing we grow it here why not finish it here
- Dairy-why are we shipping so much milk out of the area?
- drought conditions
- environmental impact
- Land costs too much and parcels too small (too much time moving between parcels)
- population growth
- Time
- provincial governemtn
- Marketing
- Lack of coordination with RDNO
- Fees
- Lack of education around pesticides and monoculture and how animal ag is impacting our environment and waterways
- Agricultural land sitting dormant
- Lack of support for sales of farm produced pruducts by government
- Housing supply
- Equipment too expensive
- Water rights
- More concern about having more Factory Farms than small family farms
- Local butcher
- Drought and floods have incapacitated our feed supply.
- Inflation
- Initiative
- rapid cost increases
- Accommodation for TFW
- narrow roads

- farms can not get workers
- Diminished Ministry Outreach/ALR over reach
- Milk processing facility
- No realistic options for sustainable energy sources.
- not enough governemnt support of local industry
- Access to water
- storage
- Distance to processing facility
- natural disasters/climate change
- keeping things new
- unlawful traffic
- Government subsidies for big Ag/ Quota system
- Lack of sustainability
- Farmers supports in general
- Increasing operational cost
- Government requirements and monitoring
- The provincial government to be open to thinking outside the box and helping young people get into farming
- Cold storage capacity
- Water - availability, pollution of (nitrates, bacterial, etc.)
- Climate change
- Employee Recruitment
- Competition
- supply chain issues
- Local processing of milk and cheese
- Finding breeding stock
- impacts of climate change on agriculture
- Need for opportunities to value add, store long term, access new markets (ag economic development)
- Access to local dairy
- Climate change insecurity
- Limited support for environmental efforts such as regenerative agriculture, renewable energy etc
- consumers undervaluing food and farmers (expecting food to be as cheap as possible) while costs rise
- climate change related issues; fires, flooding
- Lack processing
- Access to locally produced food
- There aren't enough meat processors to process everything from Pork to poultry to wild game.
- lack of local processing
- Cost crunch for feed, vet care vs. market price of livestock
- Lack of economically feasible grain and seed cleaning facilities
- intensive livestock push back
- Dairy processing
- Rail siding access is very limited
- farmers role regarding climate change
- Crop failures
- Work force shortages

Question 5: What is needed to address the challenges identified in your response to the previous question (Q4)?

- Subdivisions into smaller parcels
- To be allowed to have a second rental dwelling
- Having a larger range of selection for home based businesses to operate"
- Fixing the cost of land problem is a different problem. Unless Canada adopts a program like the UK has where the federal government buys farms and leases them out to willing farmers on a long term lease.
- Bring in smaller abattoirs to service local smaller meat producers."
- Laws need to change at the provincial level. It would help if municipalities pushed for changes.
- More processing facilities available locally - especially for small scale producers."
- water for farmers
- water for growers
- water for agricultural purposes
- water for fighting fires
- Limit residential growth.
- Allow farm gate beef.
- Community incentives for fire mitigation.
- Store more water as a community for livestock and possibly fire suppression
- Something like the food hub network applied to meat processing facilities might be a good option if it's paired with the new Farmgate plus slaughter licences.
- Long term planning and investment
- General taxation
- more processing of all these issues central to the north okanagan/ vernon area
- govt assistance to buy farm land, equipment, build outbuildings
- encourage sale of local products in the community, rather than bringing in cheaper products from other places
- We need to get everyone on board associatated with different industries & get more all round processing
- Some local processing facilities that would take small quantities or sales markets such as a small local live stock auction facility
- Abattoir for local animals with meat inspection & custom cutting. Different size refrigerated lockers for rent so vegetable growers can properly store their produce & have for sale through the winter.
- for invasive weeds, more enforcement /enducation /care has to be taken to control weeds.. overgrazing needs to stop Drought conditions make me worry about using up the aquifers for industry on ag land, and then there are not being enough water to actually farm.
- Spallumcheen is growing rapidly which means there are more wells going in, logging and clearing land for crops that require irrigation, and destruction of natural landscape which effects wildlife and green spaces with negative impact.
- Reduce red tape for opening up smaller abattoirs
- Spallumcheen could do much more to control the spread of noxious weeds in it's own road allowances. It could enforce weed control regulations on private property
- Install irrigation
- restrict the development of farmland. Limit second homes to farmworkers
- Strategic help
- eliminate provincial government from getting involved in everything. as provincial government gets more and more involved in our day to day lives with all their regulations, agriculture business get smaller and smaller, costs go up and and agriculture business' have a hard time continuing
- Collaboration and connection between the different local areas in a strategic way.

- Better fire communication with RDNO and other surrounding agencies
- Government needs to get its hands out of everyone's pockets and quite implementing so many rules
- Lots..too many to list
- More licensed abattoirs.
- Review of subdivision rules for minimum plot size.
- Less regulation
- More community input
- Relaxing regulations for specific scenarios that would facilitate growth in the small producer segment
- During Covid/Wild Fires, a lot of price gouging going on. EG: a year and a half ago, a 20kg bad of loose minerals for goats was $40, today, it is $82! Wheat and hay have gone up dramatically as well. People shouldn't be thinking about how much profit they can make - should be thinking about helping other farmers - cause if us little guys go out of business - you lose a customer.
- New area for growth opportunity
- Funding for farmers, laborer accommodation
- More access to small processors/more small processors, more clarity about adding water utilities to ALR land
- New government but since that is unlikely, addressing problems at hand and not putting our head in the sand. Factory farms polluting our land & water but allowed. Small farmers are losing their lively hood due to lack of support from local, provincial & federal support. If we lose smaller scale farmers, we lose land, produce and meat readily available at affordable prices. We already have a rental crisis and homeless problem, and if we continue with no support for farmers & ranchers, we will lose more than we can imagine.
- Local production facilities
- Easier regulation for butchers to be licensed
- Milk process plant in the okanagan.
- Getting the BC chicken board to change the live weight pricing to local feed prices. And farmers should who raise live stock should receive government support to bring in feed from across the border.
- Set guidelines that don't change as you're attempting to get your well registered. We need an endline, or goal posts so we know what to shoot for, we're constantly being told do this and your well will be registered only for them to add more hoops to jump through, more money out of our pockets and in the end they still won't tell you what you need done to be approved.
- A reasonable price increase on fuel prices
- not sure any thing can be done
- Ease of access to the Temporary foreign worker programs (Seasonal Agricultural Worker Program).
- if you are raising livestock, you virtually have to take your livestock to Kamloops public auction in order to sell. If you are raising pigs,sheep, goats or chickens you have to transport to Langley in order to sell
- Good Question!!
- Employment pool that can be accessed as needed.
- "Better provincial communications with rural residents
- Better response to elected boards and community representatives"
- Work with Armstrong to understand their long term plan with regards to the effluent pond and irrigation system
- identify other water sources and study the possibilities of creating a irrigation system from them
- study the feasibility of having a dairy processing plant locally
- Better return from the marketplace
- Possible shared processing facilities for local producers. information sharing to help with red tape and labeling requirements.
- Funding and working together as a community to be sustainable

- Guaranteed access to effluent water from surrounding communities for watering hundred of acres of dry land crops.
- An okanagan based milk processing plant for more than just one farm to serve a greater portion of our local community.
- Better grants for solar power options for more sustainable farming methods.
- stop the stocking of our markets with produce from other countries. Canada needs to start securing its own food- and we start by stocking our shelves with local produce/products/meat/eggs/milk etc
- More places to have our animals process closer to home. More access to water to farms.
- better government regulations on foreign worker,
- A dairy processing facility in the north Okanagan
- local production and processing so that the Okanagan is less reliant on other areas to support local agriculture.
- More access to processing and selling produce.
- budgeting and looking for the best pricing/sales, making sure to keep expanding.
- 1. stop allowing parcels of land to be divided into smaller parcels within my water drainage - 2. Do everything possible to treat the land/enviroment with respect. - 3. enforce driving laws.
- Stop protecting big business, quota and exported goods. Dairy, Egg, chicken, cherries etc...
- The words, the rich get richer and the poor get poorer, come to mind. You have one producer who is purchasing up all the land, driving up prices, who pollutes the water table and nothing appears to happen to them. Then you have the producer trying to eke out a living on 10 acres of land but cannot because of all the taxes they have to pay. There needs to be a better assessment process in place to differentiate between commercial and backyard production.
- Processing, cold storage, farmer support in general
- Pay off Mother Nature, understanding and commitment from Gov to not take water away, small farm cooperative.
- Practical approach to individual needs (housing) and support for all industries including abattoirs to allow meat production to be feasible.
- I think we need the willingness of the ministry of egg and also direction to the agricultural land commission to start getting in step with modern farming not stay stuck in the 70s and preventing creative uses for agricultural land and helping farmers not just saving land pretty soon young people will not be able to get into farming due to prohibitive cost of land
- Cold storage/distribution centre
- Co-ops, greater % of product cost for primary producer, protection from subsidized international producers, national mandate to ensure domestic food production (that Canada has capability to feed itself), mitigation of agribusiness effects on small producers
- Hopefully, COVID-19 will resolve on its own. Marketing agents need to be pushed to coordinate their actions - traditionally they compete but need to move to 'co-opetition'. Climate change requires protection from heat domes (improved soils through organic amendments, increased irrigation capacity and use of shade cloth.
- More investment into farming in our area
- Not sure what can be done here
- Attract young workers to our area
- Diversity, in a word. Farmers of all sizes need alternative markets for the sale of their products, choice where to purchase goods and services, and healthy competition to ensure fair pricing for both the sales of their products and the purchase of ag consumables needed to successfully operate a farm.
- people need to to educated adout living in an actual farming area
- community water system constructed, increased construction of towers for internet, and hopefully when covid lessens supply chain issues will ease
- Find suitable location to build and find some granting to assist.

- Full service (slaughter and processing) Abbatoir, place to link skilled manual labour and farmers needing help.
- greater flexibility, local opportunities, education, training and funding to address climate change impacts
- Local policy to address climate change, and municipal/regional leaders working with other levels of government to address climate change.
- I'd love to have access to leased greenhouse space, so I can scale up vegetable seedlings for our farm and to sell to nurseries. We don't have access to natural gas, and several other factors make it inefficient for us to build our own single greenhouse. I think there would be cost efficiencies having shared facilities leased to farmers.
- At a local level perhaps there are opportunities to help support training initiatives or something that could help attract agricultural workers to the area. Help with housing perhaps? I'm not really sure.
- Local facilities developed that farmers could rent to develop value add products. Cool and cold storage to increase access to long term storage for vegetable and fruit crops. Access to coordinated efforts to promote local produce/products - could be anything from marketing campaigns, a food hub, a year round indoor farmers market space, etc.
- More processing options and financially subsidized facilities. ie: training facilities, food hub type model. Something that helped build up the meat processing workforce base.
- Better education around sustainable practices.
- Regional facilities would be great. The recent flooding highlighted the need for this. Agriculture has grown sufficiently, and will continue to, to make these facilities feasible and necessary. We used to have egg grading in Kamloops and milk processing in Armstrong.
- 1. Promote & Make it easier for everyone grow and sell produce, meat, Locally (Shuswap Okanagan)
- 2. More Heavy tax on properties not farming and producing food in Spallumcheen ALR . It does force some land owners to make deals with young farmers to make use of the land.
- 3. Support climate action! Ie: Plant trees, create wetlands, capture carbon, encourage growing gardens, Tax polluters, Any New building s must be LEED compliant and have significant amounts of trees planted
- 4. Reduce food waste
- 1. Access to agricultural water lines when living on ALR land
- 2. Financial and equipment support and expertise from knowledgeable sources to fight, control and maintain control of evasive plants species across whole region. Not just individual properties.
- 3.Grants, tax breaks, bylaw allowances for businesses looking to switch to more environmentally sustainable practices.
- More programs like the Young Agrarians land matching program, ensuring that property taxes are much higher for farmland that is not being farmed, and continuing to regulate the size/number of houses that can be built on farmland. Encouraging sustainable living and farming practices (ie installing EV car charging stations, providing access and information about grants to retrofit houses and barns, spearheading alternative energy production systems; biogas etc)
- A processing facility
- Local food security. Wise water usage. Less transportation. Agricultural practices that are healthy for animals and people. Agricultural practices with climate change in mind.
- Increase buying local from consumers as well as processing to meet demand
- Stop allowing the subdividing of agricultural and ALR land.
- A place where such a business (like my current one- Beast & Block) could exist and grow would be optimal. Some sort of a leasing negotiation would have to be in place as purchasing land is well out of reach for small businesses that are just starting out. Potentially an initial lease would be put in place and then the option to purchase be visited after a certain period of time.
- 1. cancel
- 2.stop the continuous changes; come up with a plan that we can make firm decisions on.

- 3. Centralization is not always the best plan; a processing plant for dairy in the Okanagan would certainly be prudent to cope with the continued impact of climate change."
- More slaughter capacity for small-scale producers in the area. Existing facilities are completely booked a year in advance. Sales venue closer to highway. Locally milled feed at lower cost to small-scale producers. There is a clear bias towards supporting commercial/industrial scale agriculture in this community. Smaller producers are not valued.
- Ag processing in the valley
- Common sense approach.
- continued opening of slaughter house licences, province shouldn't restrict number of operations
- There are industry players who are considering entry into this market. They should be asked what support they need!
- 1. Convince farmers to try planting winter varieties
- 2. Lots already being done, but years away before we have access
- 3. More options are needed so increase rail access. Currently only a couple siding options that are controlled by a couple businesses. As a result, rail is controlled by corporations rather than the community."
- A community gathering of urban tree cuttings and unwanted fiber for us to make biochar. Biochar is added to soils to greatly and cleanly enhance food production use less water and stabilize soils against fertilizer leaching to lakes.
- Staffing for existing abattoirs and new inspected abattoirs Retail sales are limited by the lack of staffing for abattoirs and inspectors.
- I don’t know
- Governments red tape and high taxes to lower

Question 6: What opportunities for agricultural industry expansion outlined in the list below are most viable for Spallumcheen? Please select all that apply.

Other (please specify) answers:

- More orchard growing
- Auction for smaller livestock producers
- All of these are important. All would benefit Spall
- All of the above (esp. A, B, C)
- Biogas production/waste processing
- Production reach and education facilities
- farm product and equipment auctions
- Small scale farm auction sales
- Livestock Auction
- absolutely no commercial or industruial acctivities on agricultural lands.
- Growing fruits and vegetables without greenhouses. It depends on the kind of nurseries? I support botanical processing, in the case of plants and flowers as suppliments (i.e. Natural Factors), but not marijuana.
- Look at your list above. With 2 exceptions these are industrial uses that happen to be processing agriculture products. Spallumcheen doesen't have the land base to support further processing facilities. How much of the grain processed at Roger's Foods is grown in the Okanagan? The answer is none.
- We already have an organic grainery in Spallumcheen. The area used to have Dairy processing, abbatoir etc. but pushed out by regulations and big business such as Saputo. Farmer's Markets

are a good way for small producers to sell their products but prices are high and may have produce prices monitored by the market's organizers if they want to sell lower than others.

- I don't know enough about the region's strengths to have a comment. However I see a need for connecting farmers, processors and distribution, in the region.
- Places that teach people how to grow
- Freeze drying facilities
- More butchers, not necessarily government inspected ones. Locals aren't able to get their own stock butchered as more & more people are raising their own stock due to rising prices and the turmoil in our country.
- Agricultural supply companies (eg terralink, growers supply), Equipment suppliers
- Public auction for small livestock (cattle a lesser extent but included)
- home makers and bakers and freelancers for art
- This is excellent land for growing foods and should be used for that purpose with minimal building
- None
- Compost processing.
- Egg grading and packaging
- Indigenous input, Indigenous Land Knowledge.
- Training facilities for slaughter/processing staff, produce production.
- No more Cannabis growing or processing in Spallumcheen. We don't need anymore air pollution of sweet smell of Cannabis.
- scale appropriate food processing development centre, eg. https://www.alberta.ca/food-processing-development-centre.aspx
- food safe storage facilities, not necessarily cold storage, but safe dry storage
- Biochar production is a last chance to remove CO2 in a holistic way, and feed the population at the same moment

Question 7: What is your vision for the agricultural industry's future in Spallumcheen?

- More agriculture ventures
- I would like to see Spallumcheen work towards becoming independent and self reliant in the food industry, where we can produce, process, and market all our own food needs and not be dependent on the large corporate food chains. Keeping everything local is more sustainable, environmentally friendly and creates more jobs locally - and the food will be much healthier. Spallumcheen could be a leader in creating a local sustainable food system.
- It would be great if Spallumcheen could be self sufficient with food. I would like to see support for small farmers - more people growing/producing food. Spallumcheen could be a provincial leader and set an example for other communities.
- Independence from the lower mainland and Calgary. We have enough smart people to turn this area into an AG-Hub
- Keep Spallumcheen green for Agriculture. Once gone you will never get it back
- FederalGovernment inspected meat plant.
- Offer settled areas financial assistance for planting gardens. Grass consumes water and gives nothing. Gardens=produce. ROI ^.
- I think that more meat processing options would help supply local food to the community and make sure that more of the small farm lots get utilized.
- With the addition of value added processing agriculture has a bright future here. Agriculture here should be aiming to be a leader in carbon reduction.

- Try and preserve the family farms
- hopefully that spallumcheen will continue to be an ag. hub for generations to come and not degenerate as many historically similar productive areas have like parts of Kelowna or Vernon have. I think that a dedicated ag.-industry area will help solidify local producers position and encourage farmers to invest in the future of our industry
- centralized food production in northern okanagan
- Process what we grow here
- where small farmer owners can make a part-time job off their land to better raise a farm aware and happy Family!   There is nothing like family time on the FARM!!
- We have a bright future if certain facilities are available to help.
- There is no place for more industry on agricultural land in Spallumcheen. A processing plant should not use up good farmland, nor get out of paying the appropriate taxes by being built on ag land. Industrial buildings, whether used to produce bathtubs or ag products should not take away productive land. It is unfortunate to see part of the Coldstream Ranch paved over with a lettuce processing plant or the huge fruit juice plant/ building beside the highway between Kelowna and Vernon.
- Support for small agricultural business who supply food and services locally. Long term planning that preserves our natural resources and considers the effects to the environment.
- Seeing smaller farms be able to succeed and compete against the corrupt quota system
- I don't think agriculture has a future in Spallumcheen. Currently we have ILOs (dairy or chickens) dependent mainly on imported feed. Whether cherry orchards are sustainable or like ginseng will disappear once the market is sated remains to be seen. Everything else is, in reality, hobby farming. Look at percentage of land unused, or grazed to the dirt by horses and growing nothing but weeds.
- Depends on climate control and changing crops to those best resistant to heat and drought.
- Agriculture is why I moved here in 1996. It is who we are and why we are here.
- Growth and prosperity
- sustainability
- I dont have enough information
- More value add processing
- That farming truly comes first in this community. It seems that government continues to interject itself in every aspect of operations in this community
- Move away from grain making for animal agriculture and the animals themselves hidden behind bug steel buildings all over this community...So much time, energy and money goes into raising animals. We need more local produce that stays in our community to feed our own families.
- Incentives to maximize use of ALR land.
- "Small processing facilities for farm products.
- Keep good farm land as farm land.
- Use of low grade farm land for agri businesses"
- More resources
- To maintain farm land as farm related. If farm land cannot be used for farming, upzoning to supplemental zoning that would aid in farming would be the way to go. High density housing would be detrimental to farming community. For example, Kelowna has pushed farming further out and access to water is mediocre ground water supply. Please don't do that.
- Farmers helping farmers.
- As times change, adjust accordingly in a timely fashion, to the needs of the community in the Spallumcheen
- More self sustainable for the area, competitive pricing
- Bright. Develop specialty and medicinal product market because of its higher profit margins.
- That there is more support for small scale farmers (any small business owner in the agriculture industry) and not so much favouritism to the large scale farms that aren't about the community (we

know that as they aren’t even involved in our town,nor do they or their children associate with neighbours, or shop or support local businesses)

- Would love to see a local grocery store of just locally made items and fresh produce/meats
- To see a continued agricultural presence in Spallumcheen and to see it grow with new opportunities such as local processing.
- Very good
- Sell out before I go broke.
- An agricultural industry that isn't being screwed over by provincial and federal government.
- More local processing plants
- A more progressive development
- the diversity is here, Spallumcheen has a broad base and a great climate, The council has done a good job, more support services will make it easier
- The diversity of agriculture is great and also the current vision of "Farming comes First" is a great thing. Day to day operations of farming seem to be well supported by the community (eg no permit necessary for burning each spring etc)
- At present, the only ones that can survive are the quota systems ie. dairy and chickens, as they have costs of production built into selling price. They are the only ones that can afford to pay the high costs of land lease for forage.
- It would be great to see it expanded so that we could have more local products available in our store.
- Not from the area
- "Self sufficient in staples and vegetables
- Products processed to add value"
- A strong, robust and diverse agricultural community with producers and processors working together to supply the local valley with and wide range of food products and beverages.
- opportunity for farm related business
- Local product can be sold farm to retailer then to consumers at competitive prices.
- To be fully sustainable in the meat/dairy and grain industry.
- One that is more cohesive between all different types of farming, offering products and services together to reach more people. Having more processing done locally to ensure our own food supply stability. With more soil regenerative practices and community knowledge.
- support our environment- farm without harm. Stop the spraying of glyophosphates which harm our pollinators. assist funding for greenhouses to grow veg and fruit year round to sustain our community. 100 mile diet- starting with our own hub.
- To have one and a future to farm our land and animals.
- smaller scale farms that supply the local food supply chain
- A local processing facility is needed to help farmers reduce freight costs and to have a place for our milk to be processed during times of road closures and natural disasters such as last fall and winter
- Create an innovative agribusiness environment to ensure sustainability in Okanagan agriculture.
- A variety of processing facilities to support agriculture.
- that most of the product that gets sold and bought in our community to be local and energy efficient and be a more personal experience
- "Where farming comes first"! My vision is to be a farming community that is able to supply food to our community as well as those around us. Keep our food local!
- More farmers freely able to grow what is needed in the community first and stop sucking up to the dairy and chicken barns!!
- "Sustainability.
- Build and maintain something that will last."
- Grow, process, and sell products locally. support local farmers
- Sustainable small farm support to ensure small acreages continue to produce and enable families to benefit from ownership and production

- Prohibiting monopolies and creating opportunities for creative start ups.
- I would envision Spallumcheen as becoming a hub for local food production And processing and marketing
- Diversity - grains, hay, orchards, vegetables, vineyards, seeds . . . . not becoming a monoculture community like so many others in the Okanagan Valley.
- The ability to survive and thrive as a farmer, new/young farmers choosing to farm, de-centralization of agribusiness (see Jensen Dairy in Hullcar and aquifer poisoning)
- To take advantage of an expanded are of production for tree fruits due to climate change. To be a hub for organic soil amendments for the tree fruit sector.
- Stronger commitment of producers of grains, rail access, grain cleaning facilities
- New investment of industry and talent from entrepreneurs and ag companies in cooperation with the federal, provincial and municipal governments to establish modern factories and facilities that can positively impact the success of the local ag sector and ensure food security for the larger community.
- a completely diversified and integrated agricultural area
- I would like to see much more agri tourism in our area with a true authentic mandate towards agriculture and tourism
- Let's make Spallumcheen the hub of Agricuture. The highways are closed and valley is flooded
- Supporting small to mid-range producers through practical infrastructure and learning opportunities
- Opportunities are provided that support existing agricultural operations but that innovative ideas and industries have the opportunity to establish or expand.
- Thriving and diverse local food system - fruits, vegetables, dairy, meat, etc. Food grown here is also processed and consumed here with excess exported to other regional markets. It's viable to make a living as a farmer, and programs exist to help new/young farmers access leased land, so we can attract the next generation of farmers even if they cannot afford one million + to purchase property in the area.
- For our agricultural product to be locally processed and marketed. More variety and more food security.
- A valley of organic sustainability harvested healthy food.
- Continued growth and diversification. It would be great to become a regional hub for agriculture
- I would Love to see a Spallumcheen where everyone grows a garden in their front yard, and has a few egg laying chickens and other farm animals in the back . We can all safely eat the food we grow because we and none of our neighbours have sprayed any herbicides or pesticides near our food . There isn't any concentrated industrial Agriculture like huge dairy operations pollution to poison our water supply and it is safe to drink. People/farmers who are able to produce an abundance are always able to provide food to the surrounding towns and cities even in times of uncertainty like border closures, roads and bridges flooded etc. We create accessible facilities for anyone to use to process the fruit vegetables and meat we produce and we co operate in finding ways to distribute cost effectively together, there is always extra to give to those in need and all the food "waste " is recycled by being fed back to the animals ie. pigs and chickens.
- More focus on sustainability, regenerative agriculture. Less mono-cropping just to feed cattle and dairy industries. More no-till operations. Better access for farmers to sell locally, easier access for residents to buy direct from farmers and/or very locally. We live in one of the best growing regions yet we still have produce from other countries in our stores.
- More support for growers to be able to get the workers and support they need to get their produce from the fields to the stores to the buyer.
- More agri-tourism to raise awareness of regenerative agriculture.
- A more sustainable and localized food system where consumers have a closer relationship to producers and there is a broad understanding of the importance of agriculture's role both in the economy and in society more generally.
- There are some nice small businesses here. But there is a need for processing. Sharing a facility would help a lot of people.

- A place where local farmers can process their produce and sell it to their customers locally with no need for transportation and preferably with less packaging. A place to learn and share resources and honouring the Indigenous land traditions. A way to combat some of our emissions and work towards solutions for climate change, a chance to be resilient when disasters like flooding and fire strikes.
- To grow in scale as need for local self sufficiency is evident by current issues just of transportation
- To sustain the land we have. If anyone has been watching over the past 10-15 years (I was born and raised here, 44years) they would notice a big change in smaller parcels of land, and really, all it is doing is giving people large houses and acreages that are not being worked for agriculture. We really need to stop allowing this subdividing to happen or all we will have are a bunch of manicured acreages that are not being used for agriculture.
- A place where the many small scale farmers' needs can be met in one localized area. Particularly on the meat processing end of things. A facility that would meat both their slaughter and processing needs.
- Good
- Greater value being placed on smaller scale producers and farmers as in general they have a much lower and more positive impact on resources, the environment than agri-industry (mono-cultures, waste production, aquifer contamination, water usage). Small farming/family farming is an incubator for future farmers. Large producers, supply-managed producers have industry associations with strong lobbying capacity with the govt. Small producers' voices are not being heard. Focus on sustainability, environmentally-sensitive agricultural production with respect for wildlife.
- Recent road closures have identified the vulnerability the Okanagan has wrt no local food processing. Diaries are having to dump their milk. This area could easily support food production and add value to raw produce and grains or make fertilizers and soil amendments
- Spallumcheen, a farming community should remain as it is. However, too many restrictions for small farmers to make a living, just farming.
- there is enough industry for dairy farmers, except abbatoir to keep cattle hauling to a minimum. Not enough dairy in region to support a national dairy processor
- Increase self-sufficiency/resilience to shifting market realities. Become the Interior BC food processing hub
- There is a huge opportunity to grow local, push BuyBC, RegenBC, and OrganicBC. Our future for sustainable ag relies on doing things locally.
- Revolutionize farming for a planet friendly holistic cost effective, water saving zero input system allowing for a redraw for building products, to greatly eliminate CO_2 emissions.
- We have excellent nurseries, poultry facilities and dairies. Processing for dairy products would be good and we are more aware of this with the current situation with our province being in a flood crisis.
- More Agri-tourism
- Spalls vision is development and industry. And agriculture doesn't bring in a lot of property tax

Question 8: What is your rationale for choosing to operate an agricultural business in Spallumcheen?

- To be able to have a more viable income
- Spallumcheen is my home, I've spent most of my life here. Spallumcheen has the potential with all of its resources to create something really unique as a local sustainable food system.
- Spallumcheen has a good foundation/history of farming.
- Food security
- -Supporting a local food system
- Great area
- Thinking and Planning Council

- Close to services
- It is “farming used to come first
- Provide for family
- Family owned land
- I am part of a well established family business that generally is well supported by community, while being able live in a very desirable place.
- Over the years, mostly good local government.
- good land, good support
- an important livelihood
- keeping products local
- Central location & weather
- Coming from a farming background I feel this is a great place with opportunity to farm a small amount part time to be able to pass to my kids the joy of farm life and satisfy my love of farming as well as still holding down another job.
- I want to know where my food comes from & also help supply it locally.
- This is the part that you want people to write and say yes, there is demand for this land for industrial us.- to use to push your ideas to the provincial government for taking land out of the reserve.
- When we first moved to the area, we were attracted to the small farming community, with generational farming, community gatherings and event, and safe neighbourhoods. In the last few years in particular, new residents and businesses moving in our area seem to not be community minded, and have moved here because of the affordability and potential to make profit with exported goods or on a much larger scale. Our new neighbours are logging for potential development, putting in grow ops, and new wells are draining old wells dry. We moved here thinking in time that we would be able to afford our own ranch, but given the current market we may be forced to find a new location to call home. Slowly, we are becoming disconnected from our neighbours and our community.
- Prime farm land, huge agricultural community
- We own land. It is zoned for agriculture. We operate it as best we can. The direct expenses usually cover the direct costs, but we often get little or nothing for our labor, and the return on our land investment is zero
- Our history in such a lovely area and trying to keep land in good shape and productive for the next generation of farmers.
- The Okanagan has everything a person would need to survive. We need a continuing reliable water source. We raise lamb and beef for farmgate sales. We need a supporting industry to process and feed our livestock.
- Location
- that is where i am from, along with beautiful landscape
- I am a food processor in Kelowna, would be interested in learning more about this project
- I just buy product in the area
- It's where I live and our family has for generations.
- Land prices were more reasonable
- Fertile land
- "Availability of good farm land.
- Good infrastructure.
- Close to larger population centers"
- Great place with many opportunities
- A community with rich and diverse history in farming that continues to expand and be more.
- Out of my mind? Seriously, my wife enjoy it, but can't take losing money much longer.
- Armstrong Spallumcheen is a great area to live and has a smaller population base
- Overall good climate
- Good land and sunshine, proximity to other farm operations. Affordable land.

- Trying to be self sufficient as I don’t have much faith in our local, provincial or federal government
- I don’t own a business but am a consumer
- We have a poultry farm and there is a hatchery and poultry processing plant in Armstrong so it is the ideal location for our farm.
- Close to good schools and church
- There isn’t rational anymore.
- It's what I grew up in.
- Family business
- Its a great place to live, but honestly the high costs make it a better business case to move elsewhere
- Originally we ventured into Spallumcheen due to the lower land prices and the access to good irrigation water supply for farming.
- there is a need for agriculture for food production
- n/a
- N?A
- Climate
- Suppliers
- Soils
- Markets/transportation hub
- Great community, good land base, and opportunities to diversify.
- Was affordable
- It’s a beautiful area to farm and raise our family. With four seasons, allowing a slower rest season, and some wonderful opportunities we feel at home here.
- lifestyle
- Family business and lifestyle that we can continue foe our lifetime.
- great community that work with the farmers
- It is where we had an opportunity to get started on our own dairy faem
- Prime location.
- It is central and is surrounded by different farmers.
- to bring a personal and warm experience to everyone in the community and because the people and environment of spallumcheen is the most welcoming and friendly
- Excellent soil. Great community.
- None
- Location
- Provide for family
- Proximity to feed and farm services made it an economical choice.
- Proximity to large number of poultry and dairy producers as well as fruit production
- Excellent growing season, central location with good access.
- I love this area, grew up here, maintain a family farm and enjoy doing it, but otherwise do not see much rationale to choose becoming a genuine farmer in Spallumcheen (or elsewhere) .
- Land prices.
- We want to see our local community grow so future generations can stay here instead of leaving to find work.
- Our market research show that the Spallumcheen region has a healthy and strong agricultural base. We expect the region will continue to grow, and it is also strategically located geographically for import, export, and manufacturing of ag products. The region can supply a skilled work force and provides the necessary services such as roads, rail, and other infrastructure that is required for a successful ag hub.
- i was born into this farm
- there are great service partners in the area to support agriculture and I am trying to expand the agri tourism piece in our valley

- The area is productive and quiet
- Beautiful area, friendly people.
- It's my community. I love the people here. I like the weather, and appreciate the fairly long growing season. It's rural, but not remote. It's a beautiful place, and I appreciate the green/wild spaces.
- We have land here.
- Land costs
- It is very central to feed supply, processing and our allied trades.
- I believe there is a great community here, there is abundant fertile soil, and a potential for us to do real good in providing healthy food to people.
- Good soils and climate, close to family. Not the lower mainland.
- This is a fourth generation farm on beautiful land, with a supportive, albeit small, community.
- We live here
- This is the best place on earth. It has it all. Diverse amount of plants and animals. Strong history of First Nation and their land. Agreeable climate (if you not consider the heat dome of last year) for raising animals on pasture. Close knit community that believe in the importance of farming.
- Climate, soil and direct marketing options via farmers' markets
- When we got into it, 19 years ago, land was at a decent price to justify working it. I grew up here, therefore loved the community, but now, I am ready to go elsewhere as the growth is doing nothing for this area or the community. If we want to preserve what we have here, we have to stop looking for growth and tax money, and start looking at what we have and sustaining that. I agree that some growth is good and positive, but not all.
- Location-Close proximity to Vernon, Armstrong, Lake-Country, Salmon Arm, Enderby etc
- Agricultural Culture- Spallumcheen is a township that prides itself in their agriculture.
- Highway Access- Easy access for large trucks, customers, deliveries/shipments etc.
- Existing Services- The industrial park that already exists would undoubtedly prove to be a valuable resource as there could be shared services.
- Density of Customers- There are many small scale farmers in the area.
- Family oriented
- Live here, have property here. Enjoy having livestock and growing products.
- Lower land costs and climate. Cooperative council friendly to farmers and farming.
- Agriculture is fitting into the landscape of Spallumcheen
- not an agri business, I'm a dairy farmer
- Most agriculturally diverse area in Canada, good agricultural infrastructure and support industry
- Affordable Industrial property
- My rationale is found in education about climate change and the exciting actions farmers can take to help us survive on Earth. Farming may be key to repairing emission's damage we have done
- The rural location and availability of good veterinarians, livestock feed companies, fertilizer company and availability of custom farm work.
- This is our home, offering many amenities, and the land was affordable when we purchased it. At the time there were very few flower farms in this area
- It WAS where "farming comes first " now with bylaws and planners treating us as developers is ludicrous

Question 9: Please provide any other comments you may have.

- We have lost our auction market! We would like to see another one established for local farmers to benefit from
- I think we need to follow a western european model where local food industry is the central focus and goal. We need a place where local producers can see their products on a free market basis without the fear of being under sold by larger competitors who are subsidized. A place that can be set up to sell

local meat, local dairy, local produce, a place that is unique and absent of all products from the large external competitors, a place where people come because they know its 100% local.

- I think Spallumcheen is in a unique position. There is strong history of farming; the community is very agriculturally minded, there is room to grow - and stay small at the same time. I would like to see a community centered local food system and smaller farms and companies, no huge/big name corporations.
- Roundtable meetings bring out the real farmers with real concerns.
- I think that biogas is one of the most helpful investments that we could make to support the dairy industry and reduce our GHG emissions. It would also reduce water pollution. However I don't think any of the proposed sites are close enough to where the dairy farms are located, for a biogas project to make sense.
- I appreciate local governments positive interest in agriculture
- I am very impressed with local government's pro-active role in initiating this survey and encouraging local investment in the ag. industry support services other than just actual crop production. Any industry is only as good as the support available to it!
- We Love living in Spallumcheen country and appreciate what you as a farm driven community have done and will continue to do for us!
- We need to become more self sufficient locally so we are creating a healthy environment & creating less pollution by not having many products trucked here. With the mountain passes & climate change, we can’t always rely on other areas of the country & world to get our food.
- Water shortage is going to be a huge concern as our climate heats up. this is something your feasibility study needs to look long and hard at.
- Please stop giving approval for marijuana grow ops. There have been a few that I can think of in the area that put in all the infrastructure, and then went broke and walked away. Even if they did succeed and start to grow plants, the stench is unbearable and the security fencing and lights 24 hrs is an eye sore. This should be done in an industrial park and not on viable agricultural land. The water needed is not available in many parts of the North Okanagan.
- Am I correct to assume that Spallumcheen wants to use this survey to extend industrial land use north along Highway 97A? That is the worst kind of urban sprawl. It would however fit a Spallumcheen pattern, namely rezoning ag land for industrial use, but providing none of the services needed for industrial/urban land use. This will do nothing for agriculture in the district except add some more traffic to rural roads. Please don't do it.
- We need to consider neighbours especially if an abattoir is a possibility.
- If farmers put as much time and energy into staple plant foods like potatoes , greens, corn and other grains (for humans not feeds), we wouldn't have the gouging import prices at the bigger stores. And the locals would have access to clean fresh produce. Most of the meat and dairy produced here gets processed elsewhere anyway. Tell me how local our farmers here really are? Why am I paying $7 for an organic cauliflower at the Armstrong askews?
- Thank you for doing research
- This is a very disappointing questionnaire. Why are you so concerned about the future of the agriculture industry? We are in crisis today! We need to save what we have now, so there is a tomorrow. I really am not concerned if there are more wineries, dairy farms or a grow op coming to Spallumcheen….
- I want to know what help is going to be there for these small scale agriculture businesses to stay afloat. Help buying enough hay so the rancher can keep his herd till spring or help the farmer pay his mortgage that usually relies on his 3000 bales for income but only got 700 bales this year or the Christmas tree farm that needs a grant to buy new seedlings as they lost all their trees to drought. I want to see help for my community to stay alive.
- I would like to hear the results from this survey and what spallumcheen, the provincial government and the federal government will do to help mitigate these findings.

- I would like to see local government stand up to the provincial government and request set guidelines for well registration, farmers shouldn't be getting forced through hoops without seeing an end line.
- A wild idea would be to put up a large farmers market like St. Jacobs (Waterloo ON) that could operate year round and essentially incorporate the Vernon Farmers market and others into one larger one.
- Not in the area
- Salute to Kwantlen Bio Region Report and Land to table initiatives
- Would love to help grow the farming community here in Spallumcheen!!!
- I hope that my small bakery business can be more than gifts to family and bring something new to the market thank you
- Agriculture and industry are to very different uses for land. The proximity to Swan Lake means water for crops should be readily available, and soil should be excellent. Industry tends to mean a lot of concrete and pollution.
- I am hesitant to be in favour of any subsidized activities in question #6, I know individuals operating almost everyone of those activities, often against the odds. Many terrible government decisions have propped up a narrow few activities maybe start by undoing those.
- Another main reason our company, Okanagan Valley Feeds, has chosen to locate our new state-of-the-art feed mill in Spallumcheen is the decision making and forward thinking the Township Mayor and Council provide. Confidence in the municipal government and their support for our project was important for us when we decided where we were going to build our new feed mill.
- With all of the fires, floods and highway closures it is obvious that we need to feed the interior of BC.
- I'm really interested in being more involved if there are opportunities.
- If there are any farming round tables or further discussion I would be interested to continue sharing ideas.
- I think there are many changes happening in the world today including our understanding of food security, more environmentally sustainable farming methods, increased frequency of 'extreme weather and or climate
- events'. These are hot topics after this past year and will not be going away any time soon.. we should be adapting to provide a more resilient industry. Which allows us to support ourselves and the environment.
- Buyers are becoming more brand sensitive, with more buying choices being made based on how environmentally focused a business is, supporting local etc. Our region could be self sustainable if we start moving into a long term regenerative mentality."
- I would like to see more environmental monitoring in our region to help producers make good choices to ensure the longevity of our farmlands. Encouraging producers and our community to be more conscious and responsive to climate change would help to increase the desirability of the area in more ways than one; as a food destination, a beautiful tourist location, and a community at the forefront of positive change.
- Globalization over the last 100 years has meant the end of much local production and prosperity. Climate change and world events encourage more self sufficiency
- For myself and my business, the opportunity to put up shop in the Agri-hub area would be absolutely ideal. However, there would have to be a clean source of water, reliable power, and substantial water treatment. Additionally, the ability to lease the land for the first few years would be absolutely crucial in making it work. As far as parcel sizes. 1-2 acres would be ideal. I would need less than 1 to begin but foresee significant growth in the coming years and would likely need 2 before too.
- Continued sound Municipal government must be maintained. Since so much emphasis is being placed on agriculture in this survey more farmers should consider running for council but try and get them off the farm; well that would take another in depth survey.
- The focus on industrial-scale, commercial agriculture and the disparaging comments and policies towards small-scale producers by this municipality (eg. during wildfire evacuations) is very discouraging.

- Supply managed commodities comprise 80% of the agricultural industry in the RDNO/CSRD, most of which are located between Spallumcheen to Salmon Arm. Dairy & poultry each provide significant volume with which to develop value-added processing opportunities.
- I have a team of people joining my company so we can work together. Four members bring microbial new findings to the table. That gives us power to deploy my 20 year experience doing phytoremediation projects. We have added "steroids" to our ability in the drive to revalue real estate and to reclaim brownfield lands.
- All things we have mentioned we realize are expensive to do. The dairy industry would no doubt welcome a plant here for processing as would consumers.
- Anyone who wants to start a commercial farm I strongly suggest to buy outside of the township. The focus is on country living ,2 residences and good taxation base

Spallacheen Interviews- Feasibility Study- March 2022

Interviews completed

		Completed- 14		Concept?
		Andrew Klingel	Ok College	interested
		Derrick	Rogers Foods	referred to Brad
		Liz Blakeway	Land to Table	good
		Tracey	Zest Food Hub	good
		Lindsay Benbow	BC Ag	good
		Leigha Horsfield	CFC Vernon	good
		Colin Laidlaw	Swan Lake Mkt	referred to Randy
		Stephen Evans	Mission Food H	good
		John Perrott	Vernon Ec Dev	good
		Jessica Wick	Accelerate OK	no opinion
		Kazia	CFC Vernon	good
		Lenore Neuman	UFV	good
		Tessa	Young Agraian	good
14		Gladys Fraser	Scotia Bank	traded calls
		9 sent but NA		

The interviews were completed from a list which was used. The process included sending out a letter of introduction and the brief survey questions. The interviews were from 15 to 40 minutes. Generally people are interested and require more information for any decision making.

Major Themes Discussed

1. All people interested to hear of Project. Land to Table group will send a note out to their 100 or so members for more feedback. Chamber of Commerce in Armstrong may be another place to interact.
2. Current Land Base- how many acres, water, soil type/ CLI, where, etc.? Need a descriptor for what is being offered/ lease or buy rates etc.
3. Proximity very good; highway location excellent
4. Spall area- business prof does not see much interaction here- other areas do have entrepreneurial connections and starts they deal with- for free. Others also agree the area is very good for action.
5. BX Land in area to be avail- about 120 acres- in Vernon area. They are planning to make available to farmers for use
6. New invest of 500 acres for vineyard, but to date issue due to land slope, mudslides now a lawsuit?
7. Farm interests- yes many small scale farmers appear interested but not much is done in a collaborative manner. Young Agrarians report more land than new farmers at this time.
8. Community interests- due to last years' flood and lack of food access – the leaders see a need for food security, local supplies, processing and resilience measures. Longer term see the global warming (maybe 2 degrees) causing water and land stress and new opportunities for a region. The NO region lacks many basic food access and prodn. Is a

need to develop new ways to sell into public markets (University, etc) and other niche markets.
9. Crop interests- cherry prodn due to later growing season and can meet higher market prices; farmers are taking out apples for cherry trees.
10. Others- possibly vegetables, orchards? And crops
11. Gaps- commercial kitchen in Vernon area, freezer, refridge and dry storage, egg grading station, local slaughter, some equip and food product advice. Seems here may be a market for this service.
12. Salmon Arm has a food hub/ facility. Rented building, a number of clients – some daily rent and some on longer term rent. Food trucks a niche for them. Not seen to be competitive to anything in Vernon area. People now drive to Kelowna for services too.
13. Opportunity (not ranked)- Based on the feedback to date the three opportunities seem to be: 1. Rent or sell land to farmers for a crop- cherry prodn of high interest. Not sure of crop opps due to need climate and soil data. 2. A food hub / shared facility which can provide equipment and comm kitchen plus storage. Is hard to define what is needed. 3. Regional yr around retail store and storage facility for farm products. Would need more detail on each option for the farm community to review.
14. Several groups are quite supportive of the project- CFC Vernon, Ok College, Young Agrarians, Land to Table, Vernon Ec Development, BC Ag, Mission FH and Zest Food Hub. Several people want to see findings and willing to be in a focus group. BC Ag staff were generally supportive of the study in concept and any specific projects or land use changes arising from the study would require Ministry review and comment.
15. Steps to development- clarify the current land base/ soil/ water etc and potential uses. The options must be feasible for a farmer/ community or will not go/ be supported either. Then build awareness and market the project through several channels. Once a few more interviews are done/ synthesized- then need a draft ppt to set out the options and current situation for people to understand/ discuss for their direction.

Comments from Interviews

1. Land for agriculture is limited in BC and we need to produce more food locally.
2. Opportunities- we lack local leadership on these ideas. The CFC in Vernon started a new program called Reach- an Ag Accelerator program to help build a network of similar small scale farm owners and producers. It has operated for two years with about 10 per program intake and has been very successful. It may end this March, depending on funding. This program has helped to address the gap but longer term the leadership issue still remains. A hub for agri-food developments/ advice/ mentoring/ etc is lacking.
3. Most people are on their own. This does not fit the Chamber role. Land to Table group is starting to break down the silos a bit more. Each commodity has a different model too- sheep, beef, dairy, chicken.
4. We need a “doer organization”. The food hub concept is another opportunity too. Seems to be a lot of demand for a food hub. Need shared equipment, commercial kitchen, storage. There are a few private groups which do allow for rent but is not easy to access. Some local churches also are available. It can work in the Spallacheen area as that seems to be the farm production area/ farm centre.

5. Is a need for meat processing and some dairy processing. Egg grading is a common need it seems as many people are selling eggs locally.
6. Land uses- what can we grow here? Try for no fertilizer, need water and good soils. Is an interest to provide foods for local uses- hospital, college/ etc. How do we make it viable?
7. We need a champion on the idea. May need a food centre and training too. The college tries but no one here really does this agri-food activity. The Reach program has made an impact. An application is made to join, is reviewed and accepted or not, help in a business plan, then funding to help do the plan and they also join a peer network. After the program, the network can continue.
8. Barriers- where are the new young new farmers? People are leaving due to retirement. How can we market – “how to become a farmer?”
9. Young agrarians- people do need to see it as a career opportunity- but is difficult to enter and is expensive too. Need some experience and mentors.
10. The region has a lot of potential and we need to keep the groups together. Land to Table is a good model. May need a lending program and shared equipment.
11. The North Okanagan has an agriculture plan and priority 2 fits- to strengthen and build agriculture economics. Young Agrarians help in leases with land owners and farmers. Have done 100s of leases and have a good model. Can list the land and send it around to interested farmers. Need to know the area, soil etc and they can do an assessment for free.
12. Opportunities- people are looking at growing more cherries and are taking out apples to replant. Need a say 20 yr term for these type of crops- to get the return back. BX lands are also being released for farm uses. Did the same thing in Kelowna and they want the land farmed.
13. Economic viability is a key. Small scale and nearby farms can be viable sell direct to customers in many cases. Organics are also popular and have markets. Maybe a fit for orchards- cherries? Need to check but there is a demand for these crops. Tried meat chickens and lost money on it. Economics are key
14. Is interest in wine grapes too- Plenty of Fish owner bought 500 acres in Vernon area. Can it be done?
15. Farmers want- security of term on land, cheap land or at least accessible $$, a farm tax assessment, maybe other support- on fencing, water, etc. Also is it possible to access shared equipment and infrastructure (tractors, tools, harvesting)?
16. Storage is needed in the region too. Dry and freezer for small producers. Was some available before but not now.
17. ALR – regs have been reviewed for last 2 years and are to be changed. Will be more flexible for advanced ag uses (value added?). BC govt is worried that site C dam demand may be low- so are looking for demand matches. Municipal govt can seek out allowed uses and can do more under new regs. Check if released yet. Is a trend to pods of this activity in the province. Some questions came up from floods- local foods, need for storage, more flexible uses, resilience etc in BC. Storage is a common issue too.
18. Zest- is a new food hub in Salmon Arm for small scale food processing and packaging/ storage. Have 2 catering kitchens to work 24/7 in a rented space. One kitchen opened in

Dec, second one is to be planned. Rental building and needs gas and power. Have clients for the food hub- caterers, food trucks, small processors. Food trucks are a growing trend. Have 4 anchor tenants (6 mth leases) and others on scheduled rent. They need insurance, food safety plan. It offers some shared equipment- kettle, com oven, deep fryer, dishwasher, other, and cold storage- a 40 ft reefer. Rent is $15.50/hr- kitchen and other charges as needed. Have one Vernon processor using the space. Is not likely to be a competitive space to the region.

19. Needs in the region- egg grading, some processing, dry and cold storage (farmers want it). Have 2 cideries in the area and 3 breweries.   Clients use it – 8 hrs x 2 shifts per week and others every other week. Food trucks are increasing as a user. Revelstoke is building a food hub too.
20. Land to Table group- has operated for 4 years. Is a regional group with about 100 people. Have set priorities and do workshops, studies, regional network and support to farmers. Have worked with KPU and UBC on food study projects. Cold storage is missing in the region- Rancho Cooling- used to offer space. Enderby has a com kitchen for use but lacks any internal training for users. Farmers are building their own on-site as there is a gap. Need coordination and capacity such as a food hub. With the flood- showed the need for local food processing and storage and access. Farmers have tried co-ops but they did not work. Some people do truck to Kelowna for processing and then truck back.
21. Top opps include- cold and freezer storage, organic animal feeds- people are buying from the coast for their livestock. Chickens and laying hens. Cideries- have several in the area. With the floods- dairies were pouring milk out due to a lack of processing. Locally have a few processors but can do more in fluid and yogurt, some cheeses. Are some small cheese processors in Sicamous, Salmon Arm, Lumby. Need to build storage capacity. Meat- farmers can do more and need a processor. Is under the regs. Eggs- is a big are for growth, no egg grading station in the region. Are farmers markets in the region. Small- scale processors- need a central location and transport to the market.
22. The North Okanagan is a broad region and diverse- which is a limit too. Vernon- has small greens, tree fruits, and climate will help- seems to be changing (warming). What is a supply base for a processor? Need to know. Is there enough product? Is there a demand for the product? Is lots of talk on food supply issues.
23. ALC needs farming on the lands. But may be an opportunity. OK Feeds- is in the area. Spall needs community engagement on the issue. Will someone invest here? Need to check on allowable uses for ALR lands by ALC. Is a rail line nearby too.
24. Value added will help. Global warming seems to be helping- the wineries are moving up the valley. Plenty of Fish owner bought some land for a new winery. Cider and tree fruits are options in the region. Cherry prodn is of interest too- fits the market well- supply meets the lower supply seasonality of market. Farm gate sales are a good thing. Food hub- can be near the highway and match with local prodn. Cider may work- cycle time is shorter. Is there nat gas nearby- can try greenhouses. Veg Pro grows and sells micro greens (500 acres). Need- labor, temp foreign workers. Barriers- ALR land use- is it allowed? Agri-tourism is a good fit. Growing season is changing and crops may change too. May need more small growers. Why is there no greenhouses in the area? Need to

focus on the high value products. The big draw to BC is land, mountains and lakes- which also are limits.

25. College – they do some work in entrepreneurship and small business advice- for free. See a lack of shared facilities in processing, need space for scale-up. Salmon Arm has a new food hub- shared space, equip and advice. Nothing like this in Vernon. Has met with lots of cos in the region- not many in Spallaheen region though. Would like to meet on local business issues- maybe they can help.
26. Mission Food Hub- is proceeding on a first phase in Abbotsford. Looking at shared space for small processors- with a common cold warehouse for rent/ use. Need a vehicle to allow for scale up. May need access to rail too. Also need to do training for the industry workers.
27. CFC Vernon- who owns the ALR lands now- are they for sale or for lease? Need cold storage- lot of people take product south. Maybe Davison can expand. Meat processing – is a big business and would it be allowed locally? Value added ag is growing and is needed. Com kitchen – one in the rec centre is too small. Some people drive to Kelowna to use a com kitchen. Need bottling and packaging. Can do juices, sauces, jams, chutneys, etc. maybe 30-40 possible users. Fruit prodn- do not hear a lot about it now.
28. Options – some possible ideas
    a. ALR land- rent lease or sell for farm production of crops, vegetables, orchards or new crop. Not clear on the crop enterprise yet. Cherry orchard and greenhouse are possible commercial size enterprises. Can work with Young Agrarians on sourcing farmers and new crops.
    b. Food hub facility with shared storage, equipment and management. Possible uses- foods, baked goods, egg grading, food trucks, caterers, small processors. Mainly a service function which will need BC or muni support.
    c. Food warehouse hub- more focus on storage and less on processing. Can include dry and chilled space. Include food collaboration space for meetings, shared offices (Land to Table, etc) and an ag centre for farmer meetings. Also more focus on commercial and agri-tourism programs. Can be a platform for out of region growth.
    d. Each above has diff financial and collaboration needs.

I will send more information as I get it and will keep in touch.

Darrell Toma, MSc, PAg (Dist.), FCMC

March 7, 2022

Item	Name	Organization	Comment
1	Faccini, Johanna	Queen B Kettle Korn Ltd.	Jams, sauces, salsa, popcorn, with the Small-Scale Food Processors Association
2	Couch, Jon	Okanagan Valley Feeds	Livestock feeds
3	Glaicar, Bruce	Okanagan Frozen Dough	Bread doughs
4	Brown, Mike	Valley Direct Foods	Warehousing
5	Vignola, Indra	Rancho Vignola	Nuts, dried fruits
6	Fried, Halee	Farmstrong Cider	Fruit cider, beef, poultry in the ALR
7	Van Den Taillaart, Tony	Fieldstone Organics	Ancient grains, flour, located in the ALR
8	Nikolaisen, Mike	Miane Creek Livestock	Feedlot operator
9	Smith, Ken	Gambrinus Malting	Malt
10	Pounder, Lori	Askews Foods	Local grocery chain
11	Gunner, Andrea	Rosebank farms	Organic poultry, agricultural consultant, NO Accelerator Program
12	Clancy, Ken	Okanagan Fertilizer	Fertilizer, seed, pesticide
13	Meggait, Steve	Valley Fresh Farms	Organic beef, chicken, turkey and heritage pork in the ALR

1. All 13 interviewees were interested in knowing the results of this consultation process and all said that time permitting, they would participate in a focus group at a later date.

2. The general composition of the sample is as follows:
   a. Agricultural product processing in the ALR (4)
   b. Agricultural product processing not in the ALR (4)
   c. Supplier of agricultural supplies and services (3)
   d. Agricultural retail (1)
   e. Livestock feedlot (1)

3. Participants at various points in the system tended to characterize primary production in the North Okanagan as:
   a. Diversified
   b. Small-scale
   c. Seasonal
   d. Substantial adoption of organic and natural production systems
   e. Direct-to-consumer sales
   f. Non-commercial in focus
   g. Needing improved business skills

4. Participants indicated that the primary limitations or constraints in pursuing agricultural opportunities include:
   a. Inadequate warehousing and storage
   b. Lack of cold chain integrity
   c. Inadequate staging, distribution and shipping coordination
   d. Availability of land at a suitable location
   e. Access to services, such as natural gas, potable water, sewerage systems, waste management, fire protection, 3-phase power
   f. ALC regulations and slow local government approval processes
   g. Lacking business development acumen and resources in how to scale up operations to commercial scale
   h. Shortage of labour and housing
   i. Loss of suppliers of inputs and services
   j. Small-scale food processing unlikely to be able to pay the full capital cost of needed facilities

5. Participants see the top opportunities for agri-industrial development to be:
   a. Fulfilling demand from regional consumers to buy local
   b. Tapping the food network into the agri-tourism trend
   c. Value adding with diverse small-scale food processing facilities
   d. Repatriating centralized food processing capacity
   e. Marketing the concepts of sustainability and resilience

6. Specific actions that participants identified to address limitations and opportunities: