



Regional Snapshot Series: Agriculture Agricultural Economy in the Fraser Valley Regional District



TABLE OF CONTENTS

- A Region Defined by Agriculture
- Competitive Advantage
- Economics of Agriculture: A National Perspective
- Economics of Agriculture: Provincial Context
- Economics of Agriculture: Regional Context
- Agricultural Land Reserve
- Agricultural Diversity
- Agriculture Challenges
- Agriculture Opportunities
- Regional Food Security



The Fraser Valley Regional District is comprised of 6 member municipalities and 7 electoral areas.

City of Abbotsford, City of Chilliwack, District of Mission, District of Hope, District of Kent, Village of Harrison Hot Springs and Electoral Areas A, B, C, D, E, F and G.



In partnership with:



Ministry of
Agriculture



A NOTE ON CENSUS DATA LIMITATIONS

Although every effort has been made in the preparation of the Regional Snapshot Series to present the most up-to-date information, the most recent available Census data is from 2006.

The most recent Census of Agriculture took place in May of 2011, however results will not be available until mid-2012. The snapshot will be updated to reflect the 2011 Census of Agriculture results.

CHOICES FOR OUR FUTURE: our Regional Growth Strategy

Though occupying a relatively small geographic area, agriculture forms a significant component of the Region's economy, producing almost 35% of provincial gross farm receipts in 2006.

Given the importance of agriculture, *Choices for Our Future*, the FVRD's Regional Growth Strategy adopted in 2004, recognizes that population growth has exerted considerable pressures on agricultural lands and that future growth must not negatively impact the agriculture sector.

"...Foster economic growth in the agricultural sector..."
– *Choices for our Future*

A REGION DEFINED BY AGRICULTURE TODAY AND INTO THE FUTURE

Agriculture: A 21st century industry

The Fraser Valley Regional District (FVRD) is comprised of six member municipalities and seven electoral areas and features a variety of diverse communities, from small rural hamlets to the fifth largest city in British Columbia. The FVRD is one of the most intensively farmed areas in Canada, generating the largest annual farm receipts of any regional district in British Columbia. Notwithstanding the rapid population growth of the region, agriculture has flourished and remains a crucial component of the region's economy.

Proximity to large markets in combination with high quality soils, favourable climate and accessible water as well as the diversity of the sector and proximity to educational and research institutions makes the Fraser Valley Regional District a centre for agricultural production and innovation today and into the future.

Although the region is home to a diverse range of large and small farms, agriculture in the Region is big business conducted in a highly sophisticated manner requiring substantial capital investment. Agriculture's influence goes far beyond the farm gate. As a primary industry, the production of food and other agricultural products not only provides inputs to other sectors of the economy, but is also a significant consumer of goods and services. A strong agricultural economy is essential for the regional and lower mainland economy as a whole and efforts to protect and enhance this sector should remain a key focus of regional policy going forward.

Fraser Valley Regional District and surrounding area



COMPETITIVE ADVANTAGE

A COMBINATION OF FACTORS

High quality soils, a moderate climate, water and access to markets

Soils in the Fraser Valley are some of the richest in the country supporting a broad range of vegetables, field and cereal crops, small fruits, nursery products, sod, pasture and other crops.

Climate in the primary agricultural areas of the FVRD is characterized by mild winters, warm summers and a narrow range of temperatures that only occasionally drop below zero. As a result, the region has one of the longest frost-free periods in Canada, making it one of the best agricultural areas in the country.

Summers are generally mild, although the marine influence which moderates summer temperatures along the coast does not extend far inland. The average July maximum temperature of 24.4°C in the Chilliwack and Abbotsford area is higher than that at Vancouver International Airport which has a July average maximum temperature of 22°C, although the differences on a daily basis can be significantly greater.

The region experiences approximately 1,700 mm of precipitation a year, with approximately 1,400 mm falling between October and April. Although heavy winter rains can create challenges, they recharge the region's aquifers that are tapped for irrigation purposes during the dry summer months.

Proximity to markets

The combination of good soils, moderate climate and access to water within close proximity to a local market of 2.5 million people today and one that will become a market of almost 3.6 million by 2041, provides both challenges and opportunities for agriculture in the region.

Increasingly, Lower Mainland consumers are becoming aware of the bounty at their doorstep and are making choices at local supermarkets with respect to where their food comes from. Close proximity to markets can reduce shipping costs for the agricultural sector, therefore encouraging a healthy local food processing industry so that it can continue to process foods produced in this region in the future should be a priority for local, regional and provincial decision makers.

The Fraser Valley's close proximity to the Metro Vancouver market and highly developed air, rail and port facilities provides opportunities for the region's agriculture industry to further develop potential export markets. Data on markets for FVRD farm goods is not readily available, however provincially, agriculture/aquaculture exports have remained relatively constant over the years, making up 13.5% of BC's exports in 2009. With trade barriers lowering, Fraser Valley products are finding their way to other parts of Canada, the United States, Asia, Europe and other parts of the world.

British Columbians still must rely on food imports. Some commodities are produced in BC for export and are replaced by cheaper foreign imports. For example B.C. produces high quality greenhouse tomatoes that are sold to the U.S. while at the same time it imports less expensive field tomatoes from California (BC Ministry of Agriculture and Lands, *BC's Food Self Reliance*, 2006). The *BC's Food Self Reliance* report states that BC Farmers produce 48% of all foods consumed in BC meaning that given the seasonality of food production and climate limitations food imports will remain a necessity. However, food imports can be subject to external influences such as political unrest, increasing energy costs, flooding/drought, disease, trade disputes and other issues that can disrupt access to food. For this reason it is important for the lower mainland to maintain a level of food self reliance to act as a buffer against unanticipated disruptions.



What is Agricultural Land?

Although 5% of the province's land base is considered capable for agriculture, not all land is created equally and there is significant variability in terms of the ability of land to support the production of diverse agricultural products.

According to the Provincial Agricultural Land Commission, "...the main limiting factors in British Columbia are climate and topography. Climate determines the heat energy and moisture inputs required for agricultural production. Topographic limitations mostly restrict the ability to use cultivation equipment. Soils with all their variability are also a key limiting factor. Depending upon their properties and characteristics they may be appropriate for sustaining the production of certain agricultural products, but not others." www.alc.gov.bc.ca/ALR/What_is_Ag_Land.htm

Although agriculture takes place in other parts of the province, the environment, soils and topography in the Fraser Valley enable the production of a wide variety of agricultural goods that cannot occur anywhere else in the province. This makes the quality of land in the FVRD important in both a provincial and national context



ECONOMICS OF AGRICULTURE

A NATIONAL PERSPECTIVE

Agriculture plays an important economic function nationally and provincially.

Agriculture and the agri-food sectors contribute significantly to Gross Domestic Product (GDP) and employment at both national and provincial levels. Although primary agriculture alone accounts for a small share of the total economy, the agri-food system, that depends on primary agriculture for inputs, is far more influential. Indeed, according to the Government of Canada, the food and beverage processing industry was the most important manufacturing sector in Canada in 2009. (Agriculture and Agri-food Canada, *An Overview of the Canadian Agriculture and Agri-Food System*, June 2011 pg. xiii)

The food and beverage processing industry, which consumes almost half of Canada's agricultural output, is one of the most important manufacturing sectors in Canada. During 2008-09, the food and beverage processing industry became Canada's largest manufacturing activity, overtaking the automobile and aviation equipment manufacturers which were hit hard by the economic recession. The value of food and beverage shipments reached \$78 billion in 2009, with meat and dairy processing together accounting for about 43% of the real value of food and beverage shipments, or approximately \$34 billion (pg. 74).

There is a tendency to view farming as merely the growing of food and pastoral landscapes. The reality is that growing food or other agricultural products is only one part of a much larger supply chain in which the farmer is both a consumer and producer of goods and services. According to Agriculture and Agri-Food Canada, nation-wide, producers spent over \$35 billion in operating expenses which flowed back into the broader economy. In 2009, it was estimated that the agriculture and agri-food system accounted for over 13% of BC's employment (page 21).

Provincial context

British Columbia does not have the extent of agricultural lands found in other parts of Canada, with only 5% of BC's total land area, or 4.4 million hectares, capable for agriculture. Nevertheless, British Columbia's agriculture/aquaculture food system collectively generated \$18.5 billion in consumer sales and 280,430 jobs in 2006.

Canadian Agri-Food System:

The Canadian agriculture and agri-food system accounted for 8.2% of total Canadian Gross Domestic Product (GDP) in 2009. (p. 18)

The Canadian agriculture and agri-food system provided one in eight jobs in 2009, employing over 2 million people. (p. 19)

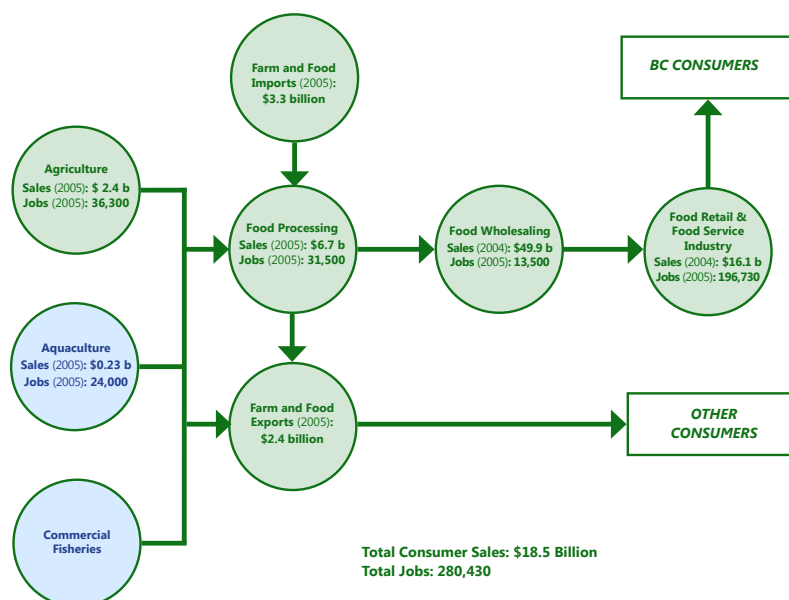
The U.S. is Canada's largest export market for live animals, red meats and other animal products, accounting for 56.6% of sales in 2009. (p. 30)

Food, beverage and tobacco expenditures represent the second largest consumer goods expenditure category after transportation and communications. (p. 54)

According to a 2010 study commissioned by Agriculture and Agri-food Canada, the main reason given for looking to purchase locally-produced food was to support the local economy. (p. 62)

(Agriculture and Agri-food Canada, *An Overview of the Canadian Agriculture and Agri-Food System*, June 2011)

Estimated Economic Impact of the BC Agri-food System



Source: BC Ministry of Agriculture *Fast Stats, Agriculture, Aquaculture & Food*, 2006

ECONOMICS OF AGRICULTURE

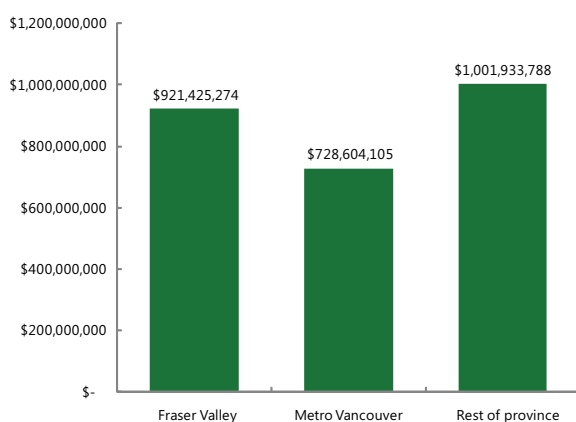
FVRD IN A PROVINCIAL CONTEXT

Fraser Valley ranks #1 in BC based on gross farm receipts

British Columbia ranks number three or higher in Canada in relation to a wide range of products, many of which are produced in the Lower Mainland. Collectively, the FVRD and Metro Vancouver generate over 62% of provincial gross farm receipts for a total \$1.6 billion. From a regional district perspective, the FVRD ranks number one in the province, generating almost \$1 billion in gross farm receipts in 2005 on only 1.6% of the province's ALR lands.

Provincial Gross Farm Receipts (2005)

Source: Statistics Canada, 2006 Census of Agriculture



Gross farm receipts reflect only one aspect of the economic impact of agriculture in the FVRD. Farm operators are significant consumers of goods and services, which are embodied in agriculture's operating expenses. In 2005, total farm operating expenses totalled almost \$790 million, much of which flowed back into the local economy.

The broader agricultural economy, which includes food processors, transporters, wholesalers, retailers and other food services industries adds yet another level of economic activity.

FVRD Farm Business Operating Expenses (2005)

	Amount in 2005 dollars
Total farm business operating expenses	\$783,723,708
Selected components:	
Total feed, supplement and hay purchases	\$167,784,276
Total wages and salaries	\$142,654,672
Livestock and poultry purchases	\$104,709,110
Custom work, contract work and hired trucking	\$42,136,036
All fuel expenses (diesel, gasoline, natural gas, etc.)	\$33,844,232
Seed and plant purchases (excluding materials purchased for resale)	\$31,817,407
Fertilizer and lime purchases	\$24,013,498
Repairs and maintenance to farm machinery, equipment and vehicles	\$22,667,054
Electricity, telephone and all other telecommunication services	\$17,484,199
Repairs and maintenance to farm buildings and fences	\$14,635,756
Rental and leasing of land and buildings	\$14,556,399
Veterinary services, drugs, semen, breeding fees, etc.	\$11,438,376
Purchases of herbicides, insecticides, fungicides, etc.	\$8,215,692
Rental and leasing of farm machinery, equipment and vehicles	\$3,620,287

Source: Statistics Canada, 2006 Census of Agriculture

BC in National Rankings by Commodity

Blueberries	1
Cranberries	1
Grapes	1
Sweet Cherries	1
Raspberries	1
Floriculture	2
Nursery Products	2
Tomatoes, greenhouse	2
Sweet Peppers, greenhouse	2
Mushrooms	2
Apples	2
Cucumbers, greenhouse	2
Ginseng	2
Dairy Products	3
Hens and Chickens	3
Calves	3
Turkeys	3
Eggs	4
Canola	4
Cattle	6
Hogs	6

Source: Statistics Canada, Census of Agriculture and BC Ministry of Agriculture Fast Stats, Agriculture, Aquaculture & Food, 2006

BC Dairy, Egg, and Poultry Industries

BC Dairy, Egg, and Poultry Industries (BCDEPI) represents the supply managed commodities that play an important role in both the FVRD's and province's economy.

A 2010 PwC* analysis of the provincial economic impact of the BCDEPI value chain found that it "...impacts the BC economy through direct expenditures on goods and services, the employment of workers and the generation of tax revenues for local, provincial and federal governments." (pg. 1)

"...Total value added generated by the BCDEPI value chain in British Columbia is estimated to be \$1.6 billion. It is estimated that the BCDEPI value chain generates employment of 26,843 FTEs with associated salaries and wages of \$949.5 million." (pg 1)

"...Employment in the BCDEPI value chain was comparable to that of the mining and oil and gas sector at 24,200 employed." (pg. 1)

* PwC - PricewaterhouseCoopers

Source: BC Dairy, Egg, and Poultry Industries (BCDEPI), *Economic impact of British Columbia's dairy, chicken, turkey, hatching egg and table egg industries – 2009 results*, PwC 2010



Food Processing

An estimated 55% of all food processing firms in British Columbia are located in the Lower Mainland. According to the 2011 British Columbia Manufacturers' directory, there are more than 50 food and beverage businesses in the FVRD, with the largest employing over 200 workers. Major food related manufacturers in the region include: Lucerne Foods Ltd, Brookside Foods, Canadian Inovatec, Abbotsford Growers Co-operative, Armstrong Cheese, Fraser Valley Duck and Goose, Agropur Division Natrel, Johnston Packers and Fraser Valley Meats.

Small-scale food processing facilities also have a role to play. The development of smaller food processing facilities in recent years reflects a trend of farm enterprises incorporating small food processing facilities and retail outlets into their business. This trend is taking advantage of increasing consumer interest in organic produce and demands for locally produced foods.

External competition, achieving economies of scale, labour costs and supply and ensuring a long-term supply of agricultural inputs are on-going challenges facing the food processing industry.



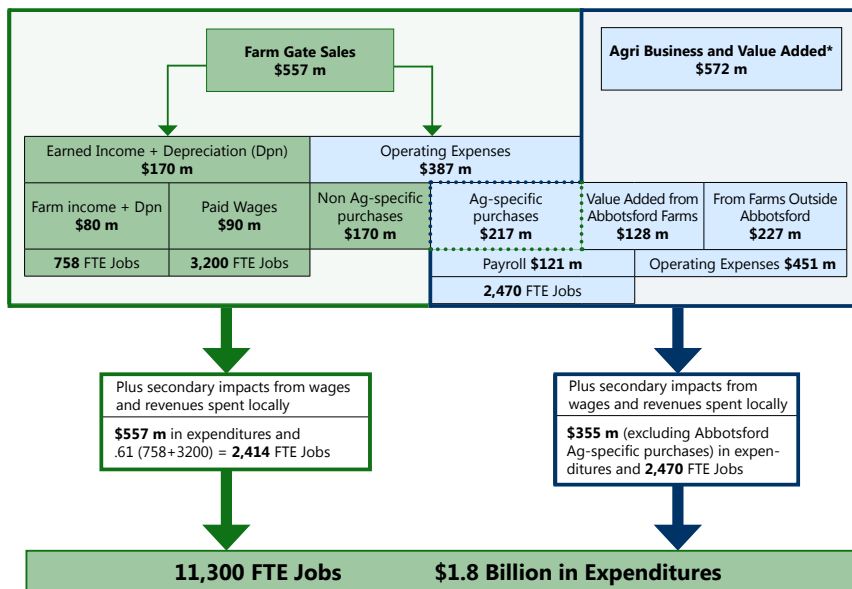
ECONOMICS OF AGRICULTURE REGIONAL CONTEXT

Agriculture is the foundation of the Region's economy

The importance of the broader agri-industrial and agri-food system to the Region as a whole can be difficult to determine, given that agricultural enterprises in the region do business throughout the Lower Mainland and beyond. For example, food processing plants in Abbotsford may process products grown in Delta or the Township of Langley. This interdependence points to the importance of protecting the viability of agriculture throughout the Lower Mainland not just in the FVRD.

Analysis of the value of agriculture in the Region as a whole has not been undertaken, however in 2008 the Ministry of Agriculture developed estimates in support of an Abbotsford Chamber of Commerce study titled *Economic Impact of Agriculture in Abbotsford (Market Based Goods and Services)*. As shown below, the analysis determined that agriculture created 11,300 full time equivalent jobs and generated \$1.8 billion in expenditures in the City of Abbotsford. Although Abbotsford is a key node for food processing and other agriculture activities, similar activities in other parts of the region, especially Chilliwack, also generate significant expenditures. Approximately 29% of Chilliwack's economic activity is directly attributed to agriculture (Chilliwack Economic Partners). A conservative estimate using a simple 1 to 1 multiplier of gross farm receipts to expenditures for Chilliwack and the rest of the region results in an estimated total value of agriculture in the FVRD as a whole in excess of \$2.5 billion.

Estimated Economic Impact of Agriculture in Abbotsford



* The "Agri Business and Value Added" \$572 m total includes Abbotsford "Ag-specific purchases" although it also appears under farm operating expenses. For the purpose of developing the final total of jobs and expenditures, the "Ag-specific purchases" total is only counted once under farm operating expenses.

Source: BC Ministry of Agriculture, 2008

The other benefit of agriculture to the Region's economy is its relative stability. Over the economic ups and downs, agriculture has held its own. As discussed earlier in a national context, the agriculture sector in the FVRD has stayed relatively stable at a time when more economically sensitive sectors, such as construction and related manufacturing sectors, have faltered.

This is not to say that the agriculture sector is not facing significant economic challenges. As discussed elsewhere, the industry is facing challenges that need to be addressed in such a way that preserves and strengthens the viability of agriculture in the FVRD and the Lower Mainland as a whole.

AGRICULTURAL LAND RESERVE

PRESERVING AND PROTECTING A VALUABLE RESOURCE

The ALR has been a critical growth management tool in the Lower Mainland

Protecting agricultural land, and the productivity that such lands represent, is essential for not only maintaining, but growing the region's agricultural economy. The Region recognizes that 21st century agriculture carries exciting opportunities in terms of technology and innovation and that we are well positioned to capitalize on what is the competitive advantage of a strong and diverse agricultural economy.

The Agricultural Land Reserve (ALR) was established between 1974 and 1976 with the purpose of protecting British Columbia's agricultural land base. Although the ALR makes up only 5.1 % of the Region's 14,000 sq kilometres, this small land base supports one of the most diverse and productive agricultural areas in Canada.

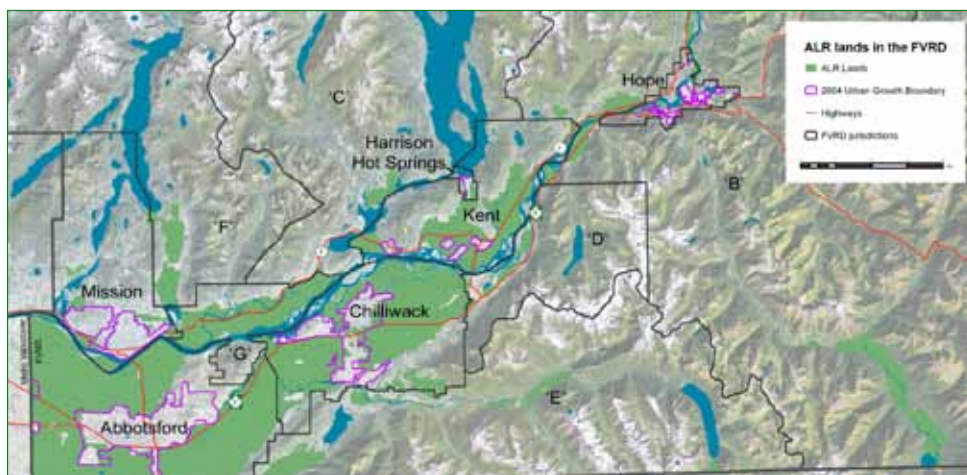
The ALR is administered by the Agricultural Land Commission, an administrative tribunal at arm's-length from the provincial government. The purposes of the Commission are:

- To preserve agricultural land;
- To encourage farming on agricultural land in collaboration with other communities of interest; and
- To encourage local governments, First Nations, the government and its agents to enable and accommodate farm use of agricultural land and uses compatible with agriculture in their plans, bylaws and policies.

The ALR has played an important growth management role in the Lower Mainland. There is little debate that without the ALR, the development trends that were in place in the early 1970's would have continued and that the region today would be characterized by urban sprawl. Instead, the FVRD is characterized by increasingly dense urban cores surrounded by active, highly productive and economically important agricultural lands.

Section 46 of the Agricultural Land Commission Act (ALC Act) requires that every Official Community Plan or Regional Growth Strategy must be consistent with the ALC Act, the regulations and the orders of the Commission; otherwise an inconsistent provision is of no force or effect. The ALC played an important role in the development of the FVRD's *Choices for Our Future* RGS and the establishment of the Region's Urban Growth Boundaries.

Primary Agricultural Land Reserve Areas in the FVRD



Source: BC Agricultural Land Commission

"The mission of the Agricultural Land Commission is to preserve agricultural land and encourage and enable farm businesses throughout British Columbia."

Agricultural Land Commission

Land in the ALR as % of Total Area

	ALR Ha	% Total Area
Abbotsford	27,459	70.6
Chilliwack	16,950	58.1
Mission	1,530	5.8
Hope	357	7.6
Kent	6,579	29.4
Harrison Hot Springs	134	18.7
Electoral Area A	693	0.3
Electoral Area B	5,747	1.8
Electoral Area C	1,171	0.3
Electoral Area D	823	3.5
Electoral Area E	2,929	3.8
Electoral Area F	2,236	1.1
Electoral Area G	5,172	44.9

Source: BC Agricultural Land Commission

Farm Practices Protection (Right to Farm) Act

In addition to the Agricultural Land Reserve, agricultural activities are protected under the Farm Practices Protection (Right to Farm) Act. Farmers have a right to farm in farming areas provided they use normal farm practices and follow other legislation listed in the Act. The Right to Farm suite of legislation provides a mechanism for the province to limit local government restrictions on agricultural activities.

A "normal farm practice" is defined as an activity "that is conducted by a farm business in a manner consistent with proper and accepted customs and standards as established and followed by similar farm businesses under similar circumstances."

Where conflicts arise, the Farm Industry Review Board can review complaints about farm practices and have the ability to order a farmer to improve or to stop poor farm practices. The board employs a peer review process to investigate complaints and attempts to resolve disputes before hearings are held.



AGRICULTURAL DIVERSITY

BROAD RANGE OF INDUSTRY GROUPS REPRESENTED IN THE FVRD

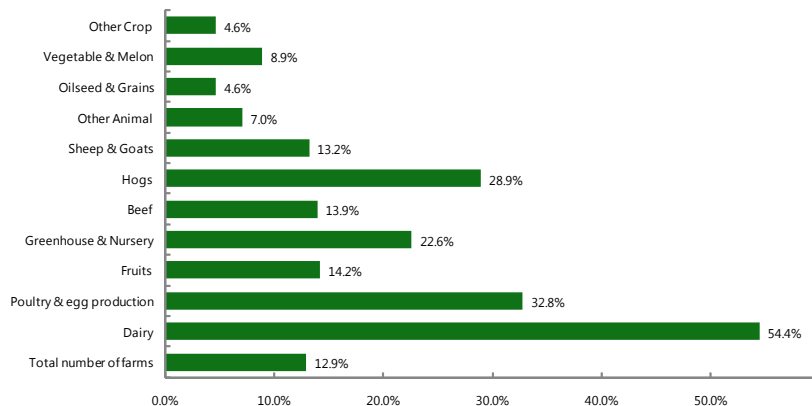
A diverse agriculture sector provides a stable economic base for the region

The Fraser Valley's agricultural sector is one of the most diverse and resilient in Canada, with a broad range of commodity groups represented. The benefit of such diversity lies in the ability of farmers to quickly respond to market shifts or unexpected events that cause disruptions, such as the 2004 outbreak of Avian Influenza that impacted the poultry sector.

The diversity of agriculture in the FVRD is reflected in the range of industry groups (by NAICS classification) represented by farms in the FVRD. Most striking is the fact that over 54% of all dairy operations in British Columbia are based in this Region.

FVRD Farms Classified by Industry Group % of Total Provincial Farms (NAICS classification*)

Source: Statistics Canada, 2006 Census of Agriculture



* North American Industry Classification System (NAICS): Standard used by Statistics Canada in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to Canada's business economy.

The type of agriculture practiced in the region varies between communities. As represented by the number of farms, dairy, beef and greenhouse/nursery farms are more numerous in the Chilliwack area, whereas poultry and fruit farms are more numerous in Abbotsford.

Although data is not available at the Regional District level, the distribution of gross farm receipts by commodity type shows that for the Lower Mainland-Southwest Census Agricultural Region (FVRD, Metro Vancouver, Sunshine Coast RD, and Squamish-Lillooet RD), dairy accounts for the single largest share of gross farm receipts (\$295 million) at 18%. However, when poultry-related receipts are combined (laying hens, chicken, turkey and other) the total share for that industry is 24% of gross farm receipts (\$401 million). Dairy and poultry are predominant in the FVRD.



Census of Agriculture Statistical Area Definitions

Census Consolidated Subdivision (CCS)	Jurisdiction
Abbotsford	Abbotsford
Fraser Valley B	Electoral Area B Hope
Fraser Valley C	Electoral Area C
Fraser Valley D	Kent Harrison Hot Springs Electoral Area D
Fraser Valley E	Chilliwack Electoral Area E
Fraser Valley F	Mission Electoral Area F
Fraser Valley G	Electoral Area G

Source: Statistics Canada, 2006 Census of Agriculture

2005 Gross Farm Receipts

Census Consolidated Subdivision	Gross Farm Receipts
FVRD (CD)	\$ 921,425,274
Abbotsford (CCS)	\$ 557,994,754
Fraser Valley B (CCS)	\$ 5,909,242
Fraser Valley D (CCS)	\$ 38,413,888
Fraser Valley E (CCS)	\$ 258,548,788
Fraser Valley F (CCS)	\$ 30,440,599
Fraser Valley G (CCS)	\$ 30,118,003

Source: Statistics Canada, 2006 Census of Agriculture

2005 Operating Expenses

Census Consolidated Subdivision	Operating Expenses
FVRD (CD)	\$ 783,723,708
Abbotsford (CCS)	\$ 477,081,625
Fraser Valley B (CCS)	\$ 5,895,016
Fraser Valley D (CCS)	\$ 31,239,738
Fraser Valley E (CCS)	\$ 218,652,909
Fraser Valley F (CCS)	\$ 26,192,278
Fraser Valley G (CCS)	\$ 24,662,142

Source: Statistics Canada, 2006 Census of Agriculture

Agriculture production continues to grow

In spite of increased urbanization in the Fraser Valley, agricultural production has continued to increase in terms of livestock, land under cultivation and agriculture taking place in greenhouses.

Historical Trends 1996 to 2006

		1996	2001	2006
Farmland Use				
Crops	ha	29,593	31,799	33,394
Summerfallow	ha	x	202	94
Pasture (managed)	ha	3,987	3,469	2,925
Pasture (unmanaged)	ha	11,054	5,518	11,233
Other*	ha	x	7,682	8,957
Total	ha	54,454	48,670	56,603
Crops				
Field Crops**	ha	22,427	23,205	24,410
Fruits, Berries & Nuts	ha	3,564	3,942	4,219
Vegetables	ha	2,477	2,501	2,311
Other	ha	1,125	2,151	2,454
Total	ha	29,593	31,799	33,394
Mushrooms (farms)	#	17	20	17
(area)	m2	59,213	74,386	120,760
Greenhouses (farms)	#	173	181	161
(area)	m2	314,667	869,216	1,185,946
Nursery Products	ha	913	1,458	1,773
Sod Grown for Sale	ha	x	229	376
Christmas Trees	ha	217	266	252

* "Other": includes 'Unimproved Land', 'Other Improved Land' and 'Woodland'

** Field crop area does not include those crop areas not included for reasons of confidentiality

*** Other Crops: also account for area figures not provided due to confidentiality

Source: BC Ministry of Agriculture, 2006 Census of Agriculture

The most significant increase, as shown in the table above, is in relation to the amount of agriculture taking place "under glass" in greenhouses. Between 1996 and 2006 there was 277% increase in the amount of agriculture under glass increasing from 315 thousand sq m to almost 1.2 million sq m (118 ha) in 2006. The City of Abbotsford has the largest area under glass in the Region at almost 704 thousand sq m. Chilliwack is the second highest with 399 thousand sq m under glass in 2006.

Historical Trends in Livestock 1996 to 2006

Livestock	1996		2001		2006	
	Farms	Livestock	Farms	Livestock	Farms	Livestock
Hens & Chickens	669	7,332,675	698	10,805,519	584	11,396,784
Turkeys	55	422,299	65	437,264	42	434,543
Total Other Poultry	226	259,528	177	552,167	111	371,172
Cattle & Calves	1,386	94,087	1,026	91,103	868	92,722
Dairy Cows	567	41,617	461	40,785	376	44,300
Beef Cows	545	6,694	360	3,793	305	4,297
Pigs	178	123,229	126	138,419	84	96,565
Sheep & Lambs	223	7,637	188	8,665	174	4,002
Horses & Ponies	565	2,596	491	2,785	456	2,634
Goats	159	2,248	141	6,366	121	3,822
Mink	10	156,320	8	163,900	6	104,700
Bison	1	x	1	x	2	x
Deer	na	na	3	148	4	x
Llamas & Alpacas	23	x	56	384	64	324
Rabbits	99	4,186	29	7,011	na	na
Colonies of Bees - Honey	43	1,936	34	3,694	51	5,459

x data withheld for confidentiality

Source: BC Ministry of Agriculture, 2006 Census of Agriculture

FVRD in Provincial Rankings

Commodity	% BC Total	Rank in BC
Brussels Sprouts (ha)	97.8%	1st
Broccoli (ha)	90.7%	1st
Raspberries (ha)	85.8%	1st
Laying Hens 19 wks +	72.3%	1st
Pigs	71.1%	1st
Other Poultry	68.9%	1st
Hens & Chickens 62.1%	62.1%	1st
Dairy Cows	60.9%	1st
Corn for Silage (ha)	56.9%	1st
Green Peas (ha)	55.3%	1st
Mushroom Growing Area (sq m)	53.3%	1st
Turkeys	52.9%	1st
Cauliflower (ha)	48.2%	1st
Strawberries (ha)	47.4%	1st
Sweet Corn (ha)	47.3%	1st
Other Fruits Berries & Nuts (ha)	46.2%	1st
Sod (ha)	44.6%	1st
Blueberries (ha)	40.7%	2nd
Nursery Area (ha)	39.4%	1st
Peppers (ha)	35.1%	1st
Total area in Vegetables (ha)	33.2%	2nd
Organic Animals or Animal products (Farms)	30.2%	1st
Goats	29.2%	1st
Colonies of Bees	18.1%	1st

Source: BC Ministry of Agriculture, 2006 Census of Agriculture

Lower Mainland-Southwest CAR* Gross Farm Receipts by Commodity

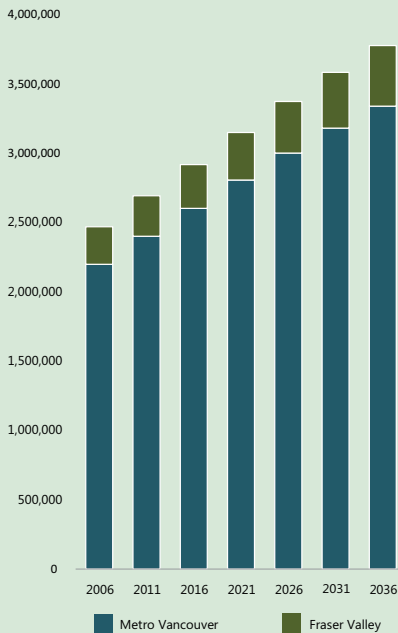
Farm Type	Total Gross Receipts	% Total
all farms	\$1,660,504,505	
dairy	\$295,254,795	17.8%
floriculture	\$220,347,462	13.3%
greenhouse vegetable	\$217,806,107	13.1%
other chicken	\$196,976,676	11.9%
berries and nuts	\$135,011,280	8.1%
nursery and sod	\$103,953,663	6.3%
other poultry and mix	\$97,002,099	5.8%
laying hen	\$78,271,141	4.7%
field vegetable and potato	\$73,183,332	4.4%
mushroom house	\$66,429,164	4.0%
horse	\$29,111,130	1.8%
turkey	\$28,630,823	1.7%
beef	\$24,202,531	1.5%
other beef	\$20,985,912	1.3%
other livestock specialty	\$18,408,266	1.1%
hay, fodder crop and forage seed	\$7,882,713	0.5%
tree fruit	\$3,663,468	0.2%
honey and pollinating bees	\$3,359,076	0.2%
other livestock combination	\$3,325,452	0.2%
beef with land leased from govts	\$3,216,619	0.2%
grain and oilseed	\$2,198,843	0.1%
christmas tree and maple taps	\$2,124,613	0.1%
grape	\$2,082,015	0.1%
other crop specialty/ field crop	\$371,229	0.0%

Source: BC Ministry of Agriculture, 2006 Census of Agriculture

*Lower Mainland-Southwest Census Agricultural Region (CAR): FVRD, Metro Vancouver, Sunshine Coast RD, and Squamish-Lillooet RD

Lower Mainland Population Growth

Source: FVRD, BC Stats



A heavy winter rainfall brings Marshall Creek over its banks - Abbotsford, January 2006.



AGRICULTURE CHALLENGES GROWTH AND OTHER PRESSURES

Farming at the edge of one of the fastest growing metropolitan regions in Canada is a challenge

The FVRD is located on the periphery of one of the fastest growing metropolitan regions in Canada. The lower mainland is expected to see an additional 1.1 million people by 2036, the vast majority of which will locate in Metro Vancouver. This type of growth will pressure lands in both Metro Vancouver and the FVRD in a number of ways, including increasing land costs, water supply quantity and quality, air quality, land use conflicts, pressures on the ALR, taxation and others.

Non-agricultural development in farming areas can lead to conflicts over noise and odors, which are often the result of normal farming practices. It was in response to these sorts of conflicts that the Right to Farm suite of legislation, discussed earlier, was enacted. Conflicts about farming areas sometimes stem from a lack of understanding of the importance of agriculture to the overall economy. There is also sometimes a lack of understanding of the importance of having access to a reliable local food supply in a world where conflict, natural disasters, disease and other unanticipated supply restrictions can arise at any time.

A survey undertaken by Metro Vancouver in relation to its Regional Food Systems Strategy (www.metrovancouver.org/planning/development/AgricultureAndFood) found that 93% of respondents believed that preserving agricultural land is at least "somewhat" or "very" important, with 67% stating it was very important. But the survey also found that 6% of respondents felt that protecting agricultural land was not important, based mainly on the belief that there are other areas of the province which can be used for food production and therefore ALR land should be developed. The fact is, the lower mainland is in many cases the only location in the province where certain agricultural products can be produced.

Agriculture faces other challenges including: globalization, currency exchange rates, achieving economies of scale, seasonality of production, labour costs and labour supply, water supply, fuel costs, and regulations/taxation from all levels of government.

Climate Change and Agriculture

The impact of climate change on agriculture in the FVRD will primarily be related to changing weather patterns. Agriculture "is extremely vulnerable to even minor shifts in temperature which in turn impact hydrological systems and the health of soils and livestock." (BC Agriculture & Food Climate Action Initiative *fact sheet 1*, November 2008) Extreme weather events, such as flooding and drought could significantly impact agriculture in the Fraser Valley.

The agriculture industry recognizes the challenges of climate change and is working with the province to address related issues. The BC Agriculture Climate Action Initiative, a joint project of the BC Agriculture Council and Investment Agriculture Foundation, was developed to explore the implications of climate change on agriculture and to identify climate change issues and opportunities. The deliverable of the initiative was the *BC Agriculture Climate Action Plan (2010-2013)* which sets out strategic directions and concrete actions related to both climate change mitigation and adaptation.

The province is working with the agriculture industry to assess a broad range of on-farm energy production technologies in an effort not only to reduce agriculture generated greenhouse gases, but to reduce long-term energy costs for producers and processors. www.bcagclimateaction.ca

AGRICULTURE OPPORTUNITIES AN EXCITING FUTURE

Building on agricultural expertise and an entrepreneurial spirit

This region has been a centre for agricultural research and innovation for almost 125 years. Facilities such as the Pacific Agri-Food Research Centre, Abbotsford Agricultural Centre, Animal Health Centre and UBC Dairy Education and Research Centre, and UFV's Agriculture Department are resources that benefit Fraser Valley farmers. The Region is also home base for the BC Agriculture Council and other commodity related organizations that represent industry interests in BC.

Pacific Agri-Food Research Centre

Located in the District of Kent, the Agassiz Experimental Farm, now known as the Pacific Agri-Food Research Centre, was founded in 1888 as one of the five original Experimental Farms in Canada.

Today the Pacific Agri-Food Research Centre in Agassiz has a land base of 310 hectares (plus a 7.5 ha field site in Abbotsford) and includes poultry research facilities, a feed mill, the Avian Research Centre, greenhouses and a weather station that has been collecting data since 1889.

The Centre houses a laboratory and office complex conducting research on a wide range of subjects including the preservation and conservation of poultry genetic resources. Other areas of research include: healthier crops, livestock welfare and production, innovative solutions for health and wellness and new and improved quality for food products. In addition, UBC's Dairy Education and Research Centre is on site, leading to increased collaboration between the Centre and University on dairy cattle research.

http://www4.agr.gc.ca/resources/prod/doc/science/pdf/PARC-CRAP_e.pdf

UBC Dairy Education and Research Centre

The University of British Columbia Dairy Education and Research Centre operates in conjunction with the Pacific Agri-Food Canada research Centre. The Dairy Centre opened in 2000 with the goal of providing education and research programs in support of the dairy industry in BC and beyond. The Centre is unique in Canada and is one of the largest in the world.

The Centre's mission is "to be a world-leading centre for dairy education, research and technology transfer". www.landfood.ubc.ca/dairycentre/

University of the Fraser Valley (UFV) agriculture programs

The UFV Agriculture Department is located at UFV's Chilliwack campus where students access programs that combine theory and principles with practical training in horticulture, integrated pest management and livestock production. Given its proximity to the region's diverse agriculture sector, graduates are employed in a broad range of agricultural occupations, including: lab technicians, integrated pest management monitors, nursery managers, farmhands, farm owner/operators, greenhouse managers, landscape technicians and many more. www.ufv.ca/agriculture.htm

BC Agriculture Council

Located in Abbotsford, the BC Agriculture Council's (BCAC) mission is to "provide leadership and to take initiative in representing, promoting and advocating the collective interests of all agricultural producers in the Province of BC". ARDCORP, a wholly owned subsidiary of BCAC, delivers a range of programs, including the Environmental Farm Plan program, to individual producers and the broader agriculture sector across BC. www.bcac.bc.ca



Abbotsford Agriculture Centre

The FVRD's agriculture industry has the advantage of being able to access agriculture experts housed at the *Abbotsford Agriculture Centre* in Abbotsford. The facility is home to provincial Ministry of Agriculture employees working in a variety of branches including the Sustainable Agriculture Management, Policy & Industry Competitiveness, Business Risk Management, Plant & Animal Health, Agri-Food Protection.

The facility is also home to the **Animal Health Centre (AHC)** which is a full-service veterinary diagnostic laboratory. The Animal Health Centre is one of only two laboratories in Canada accredited as a full service Veterinary Diagnostic laboratory by the American Association of Veterinary Laboratory Diagnosticians (AAVLD).

The mandate of the AHC is to diagnose, monitor, and assist in controlling and preventing animal disease in British Columbia. The AHC provides a full range of fee-for-service diagnostic testing, including Pathology, Bacteriology, Virology, and Toxicology. In addition, laboratory staff is frequently involved in the development of new diagnostic tests and the initiation of investigative projects to address emerging disease problems in production animals, poultry, and fish.



REGIONAL FOOD SECURITY IN THE FRASER VALLEY

Supporting a viable, sustainable and resilient industry

Food security is a broad term that encompasses such issues as protecting agricultural land, creating an environment that supports a viable and resilient agri-food system, public access to safe and affordable food and others.

FVRD: Supporting agricultural education and awareness

With guidance from the FVRD Agricultural Advisory Committee and assistance of the BC Agriculture in the Classroom Foundation (AIRC), Metro Vancouver's agricultural education material has been distributed within FVRD School Districts. In addition, the FVRD has partnered with AIRC to implement "Take a Bite of BC!", which involves promoting locally grown food products in secondary schools in the Region. The Take a Bite of BC Program is currently working in six schools in the FVRD: Chilliwack Secondary, Sardis Secondary, Abbotsford Collegiate, Rick Hansen Secondary, Hatzic Secondary and Heritage Park Secondary.

The Program is a culinary education course that aims to educate young people on how and where food is grown locally, its benefits to the region, and how fresh local food can promote healthy living. In addition to raising awareness of the seasonal varieties and wide range of types of food available in the region, it also provides a direct link between the farmers and their lifestyle with the students who use the food.



British Columbia Agriculture Plan: Growing a Healthy Future for BC Families

BC's *Agriculture Plan* Vision is: "Continued development and growth of an economically viable and resilient agriculture and food sector which contributes significantly to:

- The health of British Columbians;
- Climate change mitigation;
- Environmental sustainability; and
- A growing B.C. economy."

This will be achieved by provincial agencies, local/regional governments and community and industry groups implementing strategies linked to:

- Producing Local Food for a Changing World;
- Meeting Environmental and Climate Challenges;
- Building Innovative and Profitable Family Farm Businesses;
- Building First Nations Agricultural Capacity; and
- Bridging the Urban/Agricultural Divide.

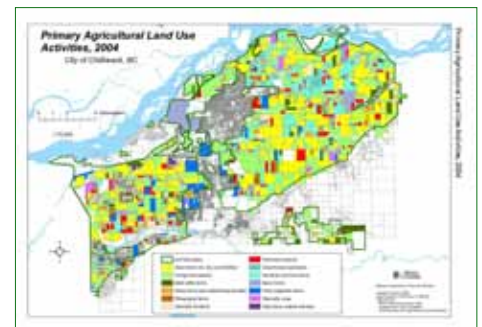
http://www.agf.gov.bc.ca/Agriculture_Plan/Agriculture_Plan.pdf

Agriculture planning at the regional and municipal level

The FVRD and our member municipalities are keenly aware of the importance of agriculture to this Region. Over the past decade the FVRD has partnered with Metro Vancouver to develop an *Economic Strategy for Agriculture in the Lower Mainland* and the Cities of Abbotsford and Chilliwack, and the District of Kent have completed or are in the process of developing Agriculture Plans. The District of Mission is considering an agricultural plan as recommended in its Employment Lands Strategy.

In addition, the Ministry of Agriculture has worked with local governments to undertake agricultural land use inventories to help the province and local governments better understand the nature of agriculture in the region.

The most recent inventory took place in the agricultural areas of FVRD Electoral Areas C, F and G and the District of Mission in the summer of 2011. These windshield surveys take place during the growing months when the land cover characteristics, agricultural activities and irrigation systems are most apparent. The resulting Geographic Information System (GIS) coverages become a valuable planning tool for both local governments and the province.



Agricultural land use inventories support municipal and regional efforts toward developing agricultural plans and other agricultural initiatives. As an example, the results of this most recent survey and others in the region can feed into the province's Agriculture Water Demand Model (AWDM) to determine current and future water demands for agriculture in the FVRD.

A social and health perspective on food security

According to Canada's *Action Plan on Food Security* (1998), food security "exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life".

In comparison to other countries, food security in Canada is quite high, nevertheless, food insecurity in Canada does exist for certain segments of the population. A 2007/2008 Health Canada household food security survey found that food insecurity is more prevalent among households led by female lone parents, families with more than three children, low-income families and aboriginal households. Low income households are often faced with making a choice between healthy food and rent. In the FVRD, more than 11,000 households spend 50% or more of their income on housing, leaving little left over for spending on food.

As discussed in the *Health and Active Living in the FVRD* Snapshot, there are health implications of not eating healthy foods. Increasingly sedentary lifestyles, an aging population, the threat of decreasing air quality and lack of access to healthy food options are all factors that have increased the rate and costs of chronic disease over time. Statistics Canada's 2007/08 Canadian Community Health Survey found that despite this region having one of the most diverse and productive agricultural areas in Canada, less than half the residents of the FVRD consume the recommended minimum of five fruits and vegetables daily.

Although income can be a barrier, it is important to recognize that personal preferences of people who choose not to eat healthy foods also plays a role. Efforts aimed at supporting farmers, farmers' markets and other initiatives that encourage people to eat healthier can ultimately benefit both the healthcare and agricultural sectors.

Regional Growth Strategy (RGS)

The *Choices for our Future Regional Growth Strategy*, adopted in 2004, recognizes the importance of agriculture to the region's past, present and future. Since the strategy was adopted, the region has undertaken a number of initiatives in support of agriculture. These include:

- Agricultural plastics recycling pilot project targeting greenhouse and dairy industries;
- Audible bird scare devices policy and research;
- Agricultural education, awareness and tourism initiatives, such as Circle Farm Tours; and
- Agricultural land use mapping in the region's electoral areas.

Upcoming:

- Working with the Ministry of Agriculture to model potential impacts of climate change on water demand in the region;
- Working with senior levels of government to ensure that the federal Species at Risk Act does not inadvertently negatively impact agriculture; and
- 2011 RGS update

Environmental Farm Plans (EFP)

The B.C. Environmental Farm Plan Program is administered by the BC Agricultural Research & Development Corporation (ARDCORP) a wholly owned subsidiary of the BC Agriculture Council. The program is funded by *Growing Forward*, a federal and provincial initiative aimed at encouraging producers from across the province to adopt Beneficial Management Practices (BMP) to enhance agricultural sustainability and contribute to a cleaner and healthier environment.

The program is voluntary, involves no cost to the producer and is confidential.

The EFP program involves conducting a risk assessment to identify potential areas of concern in relation to a farm's environmental health. This is achieved through the use of a specifically designed workbook provided by EFP planning advisors (PA). Once issues have been identified, the producer can work with a PA to develop an action plan to manage identified risks and identify priority action items.

Once an EFP has been approved, producers are eligible for cost sharing incentives under the *Growing Forward BMP Program* to undertake projects that will address environmental issues identified through the risk assessment process.

Once all of the priority items have been achieved, the plan is considered implemented and a certificate and gate sign can be issued.

The gate signs allow the public to see that the agriculture sector is doing its part in supporting environmental sustainability. This is important as consumers are paying increasing attention on where their food comes from and how it is produced.



Regional Snapshot Series:
Agriculture

Agricultural Economy in the
Fraser Valley Regional District

October 2011



Fraser Valley Regional District
45950 Cheam Avenue
Chilliwack, BC V2P 1N6
Toll free: 1.800.528.0061
www.fvrd.bc.ca

The Regional Snapshot Series for the Fraser Valley Regional District is designed to provide the public with greater insight into the forces which are shaping growth and change in the region today. For a full list of documents currently available in the series, please visit us on the web at: **www.fvrd.bc.ca**