
The Regions

This section gives a general summary description of each region, what grows in that region, and the characteristics of the region that affect the agriculture and food industry.



North Coast Region Agriculture Profile

Key Features:

- Rainfall varies considerably within the North Coast region.
- Climate varies considerably.
- River valleys comprise most of the farm land.
- Ranching dominates agricultural production.
- Large commercial fishing industry represents 65% of salmon and 85% of halibut landings in British Columbia.
- Fish processing dominates the food processing industry.



Charlottes, Prince Rupert, Terrace and Kitimat with southern centers. Prince Rupert has the largest deep seaport, but Kitimat and Stewart also boast deep-sea facilities.

The economy of the region is as diverse as its topography. The coastal communities rely heavily on fishing and fish processing. There is logging on the Queen Charlotte Islands and in the southern two-thirds of the mainland portion of the region. Pulp and paper mills are located at Prince Rupert and Kitimat, and major sawmills at Terrace, Kitwanga and Hazelton. Mining and forestry are the chief economic activities in the Stewart area.

Prince Rupert and Terrace are the leading administrative and service centers for the region. Kitimat was established in the early 1950s to house Alcan's aluminum smelter complex, but its industrial base has since expanded to include forest products and petrochemical production. Tourism is providing new opportunities in much of the region.

Population	57,663
Number of Farms	134
Land in ALR	110,278 ha
Area of Farms	11,907 ha
Total Farm Capital	\$58.7 million
Jobs	638 weeks paid labour annually
Gross Farm Receipts	\$2.7 million
Annual Farm Wages	\$413,594

The North Coast Region

The North Coast region borders the Pacific Ocean and the Alaska Panhandle and includes the Queen Charlotte Islands. It is the fourth largest of the eight regions, covering 12.5% of the province. The region includes only 1.4% of the provincial population and most of the residents are concentrated near Prince Rupert, Terrace, Kitimat and Hazelton. Rugged mountains and deep-cut river valleys characterize the diverse topography of the region.

Highways 16 and 37 provide east-west and north-south links, respectively. CN Rail provides rail transport; scheduled air service links the Queen

Land

Most of the best quality agricultural land in the region is found in the Kitimat-Stikine district, where there are 61,700 ha of Class 1-4 land. Another 42,000 ha of land, of Class 4 or better, are located in the Skeena-Queen Charlotte Regional District. Most of this land is forested. The areas of highest potential are the valleys of the Skeena, Stikine, Kispiox and Nass rivers. Good quality land can also be found on the Queen Charlotte Islands, but high rainfall limits the variety of crops that can be grown.

The North Coast Development Region covers an area of 11,885,290 hectares. Of this, less than 1% (110,278 hectares) is within the Agricultural Land Reserve (ALR). This represents about 2.3% of the province's total ALR.

Agriculture

Agriculture in the North Coast Region is dominated by cattle ranches. Farming in the region generates sales of about \$2.7 million yearly. Prince Rupert, with the largest market in northwestern BC, buys the additional dairy products it needs from the Nechako region. In turn, the Nechako region benefits from horse-breeders in the North Coast region that buy hay from Nechako farmers.

About 11,000 ha are under cultivation, mostly in tame hay and other forage crops. Other crops grown in the region include many types of vegetables and small fruits. Most of this produce is sold at the roadside. Other large enterprises include a major egg producer and several small sheep and swine operations.

Much of the region has a short frost-free period and relatively low average growing-season temperatures. Coastal areas experience extremely high annual rainfall, limiting the types of crops

that can be grown. Dense forest cover and often remote locations with limited access make clearing and breaking land uneconomical in most cases. The distance of the North Coast region from large urbanized centers does not make transportation of produce economical to these markets. That same isolation is an opportunity for local farmers to increase their shares of local market sales at competitive prices.

The Terrace area is in a particularly advantageous position. Located within reach of Smithers, Kitimat and Prince Rupert, Terrace enjoys a relatively mild climate and better soil compared to Smithers and Vanderhoof. Therefore, this part of the region has considerable potential for increased production for local sale.

Ranching in the region benefits from the opening up of land by logging activity. Integrated resource use by foresters and agriculturalists on logged areas benefit both the ranchers and the forest industry. Game farming of species such as bison, deer, and reindeer offers an opportunity for the production of high value meat products that would be economical to transport for sale elsewhere. Most of the venison currently consumed in BC is imported from New Zealand.



Aquaculture

Aquaculture in the North Coast region is limited to a few small trout farms. However, the abundance of cool clean water, both fresh and marine, and the availability of space, makes the North Coast area a rich, untapped resource for future aquaculture endeavors.

The North Coast region supports a large commercial fishery. The harvest includes a variety of species including salmon, herring, halibut, many groundfish and shellfish. Three principal methods are used in coastal commercial fishing: seining, gillnetting and trolling. Seiners account for about one-half of salmon landings, with the remainder being divided equally between gillnetters and trollers. Annual harvests of salmon, herring and most shellfish species are considered to be at or near maximum allowable catch. This is not expected to increase without significant investment in resource enhancement. There are, however,

opportunities to harvest substantial quantities of some currently under-utilized species of groundfish and shellfish, including Pacific hake and offshore flying squid. These species are underutilized because of harvest and processing technological difficulties, environmental concerns, and underdeveloped market demand. Some government programs such as the Salmonoid Enhancement Program (SEP) are helping increase the total stocks of salmon available for harvest.

Fish processing is a major industry with about 13 fish processing plants. There are opportunities for further growth in fish processing. This includes production of higher-value products that convey the unique character of the region such as smoked salmon packed in wooden gift boxes and salmon paté.

Selected Crop and Livestock Inventories (2006 Census)

Grains	320 ha
Hay and Pasture	9,500 ha
Alfalfa	279 ha
Hay	1,508 ha
Potatoes	33 ha
Fruits, Berries and Nuts	6 ha
Field Grown Vegetables	14 ha
Nursery Products	3 ha
Sod	14 ha
Greenhouses	5,275 m ²
Christmas Trees	36 ha
Hens and Chickens	3,302
Cattle and Calves	1,820
Pigs	147
Sheep	406
Horses and Ponies	388
Rabbits	150
Goats	157

Source: Statistics Canada-Census 2006

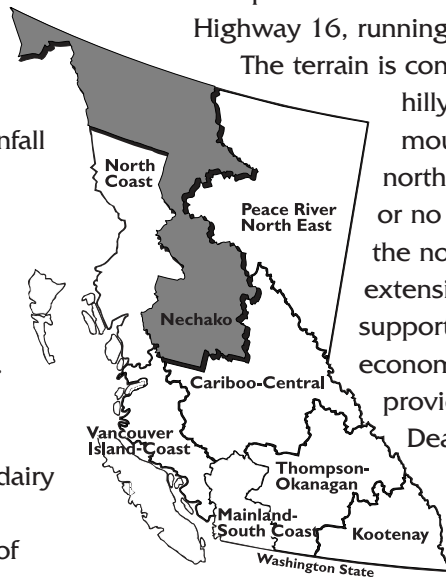
Estimated Gross Farm Receipts

Community	Number of Farms	Gross Farm Receipts
Regional District of Kitimat-Stikine	152	\$2,466,000

Nechako Region Agriculture Profile

Key Features

- Growing season varies considerably throughout the region.
- Precipitation varies throughout the region with a trend of increasing rainfall to the westward.
- Frost-free days: 52-90 (varies significantly across the region depending on geographic characteristics).
- Annual precipitation (mm) 464-522.
- Agricultural production takes place mainly in the flat river valleys and is primarily forage (feed) for beef and dairy herds.
- Agricultural production in the form of feeder cattle is sold to feedlots in southern BC and Alberta. Dairy processing occurs in Prince George and Telkwa.
- Cereal grain production is increasing.



transportation link between these communities is Highway 16, running east-west.

The terrain is composed of a high, rolling or hilly plateau bound by rugged mountains on the west and northeastern borders. There is little or no commercial forest cover in the northern half, but forests are extensive in the south where they support a large part of the local economy. The mining industry has provided the economic base in Atlin, Dease Lake and Fraser Lake.

Land

The Nechako region covers an area of 20,931,500 ha.

Approximately 1.5% (364,721 ha) of the region is in the Agricultural Land Reserve (ALR). This represents 2.6% of the total provincial ALR. The major farming areas in the region are in the Bulkley Valley-Lakes District and around Vanderhoof. Agriculture occurs mainly in the river valleys, where the land is relatively flat and the soil is fertile. About 50,000 ha of land are cultivated, the main crops being forage for beef and dairy herds.

Agriculture

Ranching has increased dramatically in the Nechako region since the late 1970s. Almost 80% of the increase in the BC cattle herd since 1976 has occurred north of the traditional Thompson/Cariboo-Central beef regions.

At the same time, new land has been cleared for crop production. The Vanderhoof district has a significant amount of cereal crops, possibly more than any other area outside the Peace River North East region. Agriculture in the region is still

Population	39,352
Number of Farms	886
Land Actively Farmed	272,488 ha
Land in ALR	364,721 ha
Total Farm Capital	\$701.6 million
Jobs	12,033 weeks paid labour annually
Gross Farm Receipts	\$54.6 million
Annual Farm Wages	\$6.26 million

The Nechako Region

The Nechako region is the second largest of the development regions, containing 20.7% of the provincial land area, but only 1% of the population. The bulk of the population lives in communities along the rail-highway corridor from Smithers to Vanderhoof and Fort St. James. A primary

characterized by enterprising part-time farmers.

The 886 farms in the Nechako region generate sales of about \$55 million, from an investment of about \$702 million in land, livestock, buildings and machinery. Much of this investment is new and has yet to realize its full potential. The high level of off-the-farm work, the tremendous agricultural potential and the relative infancy of the agricultural service sector in this region all point to significant potential for growth.

Cereal production in the region is increasing, particularly near Vanderhoof. Other short-season crops are also grown in the Nechako region. Although much new land has been made available to agriculture by clearing forested areas, the cost is very high. The local market for fresh, in-season fruits and vegetables is not developed.

The winter feeding period, which lasts from mid-November to mid-May, results in high feed costs. Future increases in local feed production are expected to help resolve this problem.

Transportation costs to markets are high. For example, shipping costs to the Lower Mainland or Kamloops are higher than that for producers farther south. With only a small local market available, shipping commodities to markets outside the region is a limiting factor on increasing production in the region. In the dairy and egg sectors, which are under supply management, producers have to buy quota to enter the industry. As for many other regions, some of consumer demand is being met by producers in the southern parts of the province who have an advantage in feed costs and production capability.

The biggest advantages that the Nechako region enjoy over the southern regions are the low cost of land and the availability of range. For example, the average cost of land in the Vanderhoof area is about 10 to 15 times lower than land near Abbotsford. Working with the forestry industry is beneficial for ranchers because it opens up range for grazing. Vegetative growth in clearcuts is quite vigorous and many of the plants make very good forage for ruminants.

The Prince Rupert grain port is a significant terminal for grain exports from across Canada. It

may offer good access for commodities produced in this region at some time in the future. Production of field crops requires refined management because of unique geographic and climatic characteristics. This is contributing to a larger livestock industry for ranchers. Despite the fact that backgrounding (feeding calves for feedlot) is well established here, some 70% of calves leave the region to be backgrounded and finished in other areas, particularly in Alberta. Expanded backgrounding could reduce this figure.

New areas of agriculture that are economically feasible are game farming and fur farming due to low land costs. Low population densities in the region mean that such enterprises could operate with little conflict. Several major salmon rivers originate in the Nechako. Thirty per cent of all BC salmon spawn in the region.

Food Processing

Food and beverage processing in the region is limited. However, continued expansion of agriculture in the Nechako region will undoubtedly lead to increased processing activity. Slaughterhouses and feed mills will be required to service the beef herd industry in the future. There is currently a small local slaughter plant and a dairy processor in the region. The regional market is already large enough to warrant local processing of dairy and poultry products. The existing quota system allows for most of the local consumption of dairy and poultry products to be met by local production.

Selected Crop and Livestock Inventories (2006 Census)

Grains	9,700 ha
Hay and Pasture	176,000 ha
Alfalfa	30,517 ha
Hay	17,388 ha
Potatoes	13 ha
Fruits, Berries and Nuts	7 ha
Field Grown Vegetables	11 ha
Nursery Products	2 ha
Greenhouses	35,379 m ²
Christmas Trees	36 ha

Hens and Chickens	9,383	Rabbits	300
Cattle and Calves	77,377	Goats	508
Pigs	347		
Sheep	3,328		
Horses and Ponies	3,380		

Estimated Gross Farm Receipts (2006 Census)

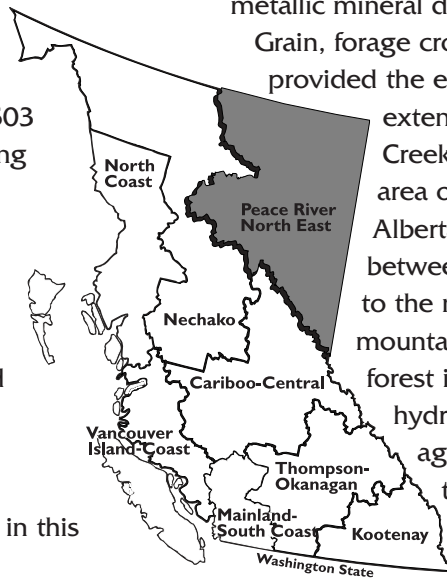
Community	Number of Farms	Gross Farm Receipts
Regional District of Bulkley-Nechako	886	\$51,681,000



Peace River North East Region Agriculture Profile

Key Features:

- Temperatures vary greatly throughout the region.
- Frost-free days: 90-115
- Annual Precipitation (mm): 446-503
- Long daylight hours in the growing season compensate for the short growing season.
- Terrain is very similar to that of the Prairies.
- Supports a variety of enterprises including forage, beef, honey and game animals.
- Produces 77% of the province's grains.
- Honey is a million dollar industry in this region.
- Some commercial vegetable production for local markets.



mining has commenced and a number of promising metallic mineral deposits have been discovered.

Grain, forage crops and beef cattle traditionally provided the economic base of the triangle

extending from Chetwynd to Dawson Creek and Fort St. John. The agricultural area of the BC Peace extends from the Alberta border on the east, halfway between Fort St. John and Fort Nelson to the north and the foothills of the mountains to the west and south. The forest industry, oil and natural gas, hydroelectric power projects and agriculture have provided much of the region's economic growth.

In the 1980s, growth was largely due to the development of coal mines southwest of Dawson

Creek, in the vicinity of the new community of Tumbler Ridge. Tourism is increasing in significance in the Northeast region.

Land

The Peace River North East region covers an area of 20,494,470 ha. Approximately 7.5% (1,523,581 ha) of the region is within the Agricultural Land Reserve (ALR). This represents 32% of the total provincial ALR.

Some select short-season crops, such as potatoes, rutabagas, carrots, beets, cabbage, lettuce, peas and even tomatoes and sweet corn, can be commercially grown in areas adjacent to the Peace River North East and its major tributaries at elevations below 800m. The bulk of the land is suitable for conventional prairie crops, such as wheat, barley, canola and forage. Just under half the ALR land (490,000 ha) is Class 3 or better.

Population	64,411
Number of Farms	1,729
Land in ALR	1.524 million ha
Area of Farms	892,903 ha
Total Farm Capital	\$1.42 billion
Jobs	21,864 weeks paid labour annually
Gross Farm Receipts	\$138.9 million
Annual Farm Wages	\$10.98 million

The Peace River North East Region

The Northeast region is the largest of the province's regions. It represents 21.8% of the land area of the province and 1.6% of the population. Generally, the terrain is flat in the north and east, and mountainous in the south and west. The central part of the region extends westward beyond the Rockies into the Omineca Mountains, an area where lode gold

Agriculture

Unique among the eight regions of BC, the Peace River North East region is generally considered a prairie region. Agriculture is important to the Peace River. During the recession of the early 1980s, it was one of the few sectors of the regional economy that remained strong.

Some 12% of the population is involved in food production. There are about 1,729 farms generating total cash receipts each year of just over \$138 million.

More forage, grain (barley, oats, wheat), seed, canola and honey are produced in the Peace



Barley



Wheat

than in any other region. Most grain, oilseed and forage seed production occurs in the Peace. Beef production is also important here, as in the other northern regions. Game farm production is growing significantly in this area, particularly bison production. Temperature variations in the Northeast are very wide, with long winters and a short growing season. The low-temperature growing season, with long hours of daylight, dictates the choice of crop types. Early-maturing crops that can perform well at lower temperatures and take advantage of long daylight hours produce good yields in the Peace.

Some of the soils in the area have a low pH (acidic) and most of the soils are prone to water erosion. Coping with this requires special management and as a result many farmers have adopted soil conservation techniques. Good soil management, including crop rotation, zero-till (seeding directly into previously cropped land), reduced summer fallow and improved tillage practices on slopes, has helped improve soil conservation.

The advantages that the Peace River North East region offers over the southern regions are the low cost of land and the lower overall cost of production for both livestock and grains. There are also fewer urban-rural land use conflicts in the Peace, resulting in fewer pressures on agricultural land for nonagricultural uses.

The abundant land, coupled with a low population density, makes the North east an ideal area of the province for expansion of cattle and hog feeding enterprises, as well as dairy production.

There is a well-established cow/calf industry in the area, with some finishing and backgrounding. Currently, 90% of calves leave the region to be finished elsewhere, particularly in Alberta. There is potential growth in the livestock finishing industry with access to locally produced feed grains.

Promising areas of agriculture with future potential include continued expansion of the beef industry, hog production, game farming, forage seed production, pulse crops, other oilseeds and organic products. Secondary processing of primary products is another area of future opportunity in the Peace River North East region.



Photo by: Geoff Hughes-Games

Zero-till Seeding



Harvesting

The local production of fresh, in-season fruits and vegetables is not well developed. Dairy products and eggs are largely brought in from Alberta. Opportunities exist for increased local production of these commodities.

Food and beverage processing is relatively small. There are some livestock processors and several honey and sugar processors.

Selected Crop and Livestock Inventories (2006 Census)

Grains	74,000 ha
Hay and Pasture	453,000 ha
Alfalfa	77,282 ha
Hay	67,112 ha

Potatoes	19 ha
Fruits, Berries and Nuts	23 ha
Field Grown Vegetables	29 ha
Nursery Products	129 ha
Greenhouses	6,531 m ²
Christmas Trees	47 ha
Hens and Chickens	39,973
Cattle and Calves	146,234
Pigs	24,381
Sheep	5,950
Horses and Ponies	10,292
Rabbits	210
Goats	689

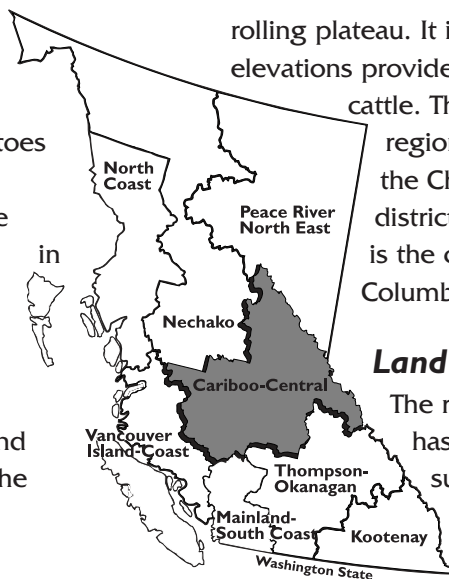
Estimated Gross Farm Receipts (2006 Census)

Community	Number of Farms	Gross Farm Receipts
Northern Rockies Regional District	30	1,308,264
Peace River Regional District	1,699	\$139,595,743

Cariboo-Central Region Agriculture Profile

Key Features

- Relatively short growing season with moderate rainfall.
- Alfalfa, root vegetables and potatoes do well in river bench soils.
- Frost-free days: 85-120. There are significant differences in climate this region. For example, there are different micro-climates in Prince George, where the river valley's frost-free period is significantly longer than the upland benches adjacent to it. As well, the Williams Lake area further south experiences longer and earlier growing seasons.
- Annual precipitation (mm) 250-630
- Produces high quality fodder crops to support the livestock industry.
- Terrain is characterized by rolling plains ideal for cattle and other livestock production.



rolling plateau. It is heavily forested, but lower elevations provide excellent areas for raising beef cattle. The Fraser River loops through the region, forming the boundary between the Chilcotin and Cariboo-Central districts. The region's southern portion is the center of cattle ranching in British Columbia.

Land

The region around Prince George has high, rolling plateaus. They are suited to cattle ranching, which takes place in the forested range and improved pasture uplands. Forage crops are produced in the valleys of the Fraser River and its tributaries. The Fraser River is the major waterway joined by the Nechako River at Prince George. The river bench soils are sandy or silty loams. They are excellent for producing alfalfa, potatoes, cabbage, turnips, cauliflower and carrots. The ancient glacial lake bottoms have a high clay content but with good soil management are very good for the production of crops such as timothy, brome grass, alsike and red clover, and oat-barley cereal silage or grain.

Agriculture

The Prince George area is in a period of farm turnover with many operators entering the farming sector. The area offers low-priced land next to a growing population center.

Production of milk, eggs and poultry is governed by provincial quotas. Vegetable and small fruit production is not governed by a marketing board, and sales are off-farm, direct to stores or at the Saturday Farmer's Market. The recent development

Population	154,454
Number of Farms	1,781
Land in ALR	1.304 million ha
Area of Farms	594,059 ha
Total Farm Capital	\$1.49 billion
Jobs	42,668 weeks paid labour annually
Gross Farm Receipts	\$112.3 million
Annual Farm Wages	\$19.75 million

The Cariboo-Central Region

The Cariboo-Central region includes 13.5% of the province's land area, and 3.8% of the population. Bounded by high mountains on the east and southwest, the region is primarily a high,



of a provincially-inspected slaughter facility will increase local meat and value-added sales of beef, bison, fallow deer, hogs, lamb and ostrich.

The main livestock and game farming operations are cow-calf, cow-yearling and purebred beef, with smaller numbers of dairy, bison, finished beef, ostrich, sheep and horses.

The Robson Valley (Fraser-Fort George) is located southeast of Prince George in the Rocky Mountain Trench. It is primarily a narrow valley along the Fraser River from Dome Creek to Valemont. The area is very productive for canola, wheat, barley, oats, specialized forage seed and forage crops. Livestock operations are primarily cow-calf, cow-yearling, dairy, horses and increasing numbers of bison. Problems in the area include rancher/elk conflicts

and the high price of land near the mountains. Advantages include low transportation costs to Alberta and a favourable climate for high-value field crops like wheat and canola.

The economy of the Cariboo-Central Region is resource-based, with strong agriculture, forestry, mining and tourism sectors. Agriculture provides a stable and long-term financial base for the regional economy. The beef industry forms the backbone of the agriculture industry. Beef production is based on the region's extensive rangelands, which provide a seasonal supply of forage. In addition to cattle ranching, the agriculture industry includes dairy, sheep, game farming, horses, poultry, horticultural crops and forage production. Opportunities exist in all sectors. All sectors of the livestock industry can increase production of good quality forage for winter feeding.

Selected Crop and Livestock Inventories (2006 Census)

Grains	3,800 ha
Corn for silage	119 ha
Hay and Pasture	366,000 ha
Alfalfa	27,320 ha
Hay	45,636 ha
Potatoes	30 ha
Fruits, Berries and Nuts	25 ha
Field Grown Vegetables	62 ha
Nursery Products	52 ha
Greenhouses	268,589 m ²
Christmas Trees	44 ha
Hens and Chickens	155,292
Cattle and Calves	155,330
Pigs	1,194
Sheep	9,149
Horses and Ponies	8,183
Rabbits	1,000
Goats	901

Estimated Gross Farm Receipts (2006 Census)

Community	Number of Farms	Gross Farm Receipts
Cariboo Regional District	1,160	\$66,305,364
Regional District of Fraser-Fort George	621	\$45,984,971

Vancouver Island-Coast Region Agriculture Profile

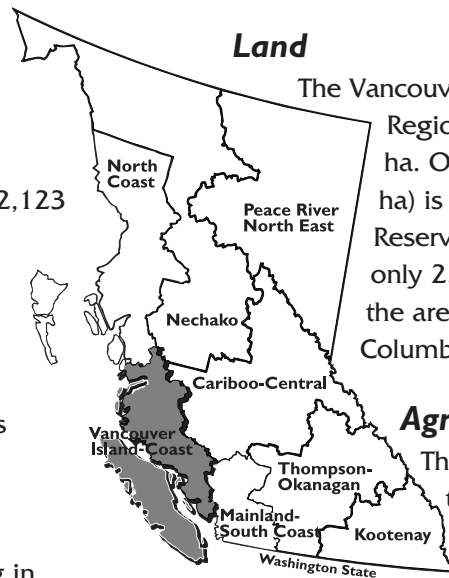
Key Features:

- Mild, moist climate-suitable for long-season specialty crops.
- Frost-free days: 158-201
- Annual precipitation (mm): 873-2,123
- Coastline is ideal for aquaculture
- Vegetables, berries, apples, and specialty crops such as kiwifruit are produced mainly for the local market.
- Livestock production-cattle, hogs and poultry.
- Dairy production dominates the region's farm-gate cash receipts.
- Aquaculture is rapidly expanding in value and scope.

Population	727,422
Number of Farms	2,855
Land in ALR	117,222 ha
Area of Farms	53,765 ha
Total Farm Capital	\$2.46 billion
Jobs	67,498 weeks paid labour annually
Gross Farm Receipts	\$163.7 million
Annual Farm Wages	\$38.44 million

The Vancouver Island-Coast Region

The Vancouver Island-Coast region is made up of all of Vancouver Island, numerous smaller islands and a section of the coastal mainland stretching from Powell River to Bella Coola. Rugged mountains predominate, except for a narrow coastal plain extending along the east coast of Vancouver Island. The region covers almost 10% of the total land area of the province, and accounts for about 18% of the population, or about 727,422 people.



Land

The Vancouver Island-Coast Development Region covers an area of 8,590,680 ha. Of this, only about 1.4% (117,222 ha) is within the Agricultural Land Reserve (ALR). Although this represents only 2.6% of the province's total ALR, the area accounts for over 6% of British Columbia's total farm receipts.

Agriculture

The major agricultural areas within the region are the Alberni, Comox and Cowichan Valleys, the Saanich Peninsula, the Gulf Islands and the Powell River Lowlands.

Food production has long been an important part of the regional economy. There are about 2850 farms (most of them small) in the Vancouver Island-Coast region. Farming, first introduced in the 1840s, has become a very sophisticated business.

In many Island communities, where either forestry or tourism are the major employer, agriculture and fishing provide a stabilizing influence. They tend to carry on steadily while forestry or tourism may vary due to seasonal and economic conditions. Many areas of land with particularly good agricultural capability are not being farmed due to land ownership patterns within the region. More land with good agricultural potential is owned by forest companies, and by non-farming residents than by farmers. Overall, only about 25% of the produce consumed in the region is grown locally. Even dairy products, which are the largest commodity produced in the region (in terms of value), satisfy less than half of the local demand.

Island farmers face challenges in transporting basic needs like fuel and fertilizer from the mainland, and in shipping their commodities to mainland markets. The cost of transporting materials and products to and from these markets leads to high operating expenses in areas such as livestock production. Water availability can be a limiting factor in some areas. However, unique markets, excellent climate and soils, and the high cost for others to access Island markets, provide many opportunities for local farmers and businesses. The potential for direct marketing of local farm products to local consumers is high. Agriculture is being aggressively incorporated into tourism and local promotions by farmers, who sell products at the roadside to local consumers.

The climate, especially on the Island's east coast, from Nanaimo to Victoria is ideally suited to a wide range of crops. Blueberries and kiwifruit are grown on the Saanich Peninsula just north of Victoria and are becoming a popular Vancouver Island commodity in markets across the country.

Perhaps the greatest potential for Island farmers is in developing products that target local markets and tourists, and have a unique "Island" character. There are many commodities that could fit this character, with the traditionally strong dairy sector expected to continue to be prominent in these new markets.

Aquaculture

Aquaculture, or the farming of fish and shellfish, is a growing industry. Of all components of the food production industry in the Vancouver Island-Coast region, aquaculture has the highest potential for rapid growth.

Food Processing

Vancouver Island has a wide variety of food processing operations. The total value of shipments from food and beverage processors is about \$165 million each year. There are growth opportunities for cottage wineries, cottage breweries and services to the hotel and restaurant industries, for specialty meats, vegetables, fruits and flowers. There is also potential for encouraging interest in locally-processed farm products, direct sales and guided farm tours.

Selected Crop and Livestock Inventories (2006 Census)

Grains	1,077 ha
Corn for silage	908 ha
Hay and Pasture	33,000 ha
Sunflowers	5 ha
Alfalfa	2,291 ha
Hay	12,214 ha
Potatoes	310 ha
Fruits, Berries and Nuts	751 ha
Field Grown Vegetables	533 ha
Nursery Products	260 ha
Sod	61 ha
Greenhouses	300,776 m ²
Mushrooms	3,824 m ²
Christmas Trees	370 ha
Hens and Chickens	850,934
Cattle and Calves	27,253
Pigs	2,814
Sheep	14,521
Horses and Ponies	3,834
Rabbits	1,400
Goats	1,949

Estimated Gross Farm Receipts (2006 Census)

Community	Number of Farms	Gross Farm Receipts
Alberni Clayoquot Sound Regional District	89	\$5,491,456
Capitol Regional District	991	\$54,261,603
Central Coast Regional District	32	\$303,931
Regional District of Comox-Strathcona	497	\$32,975,655
Cowichan Valley Regional District	700	\$47,554,455
Regional District of Nanaimo	461	\$21,186,314
Powell River Regional District	85	\$1,921,378

Mainland-South Coast Region Agriculture Profile

Key Features:

- Highest number of frost-free days and rainfall of all regions.
- Ideally suited for vegetable and berry crops.
- Dairy farms produce the highest farm cash receipts.
- Contains more than half of the province's population.
- Significant greenhouse production—poultry, hogs, cattle and sheep.
- Produces over 70% of BC's dairy products, berries, vegetables, poultry, eggs, pork, greenhouse vegetables, mushrooms, floriculture and nursery products.
- Primary site of the province's food and beverage processing industry.
- Annual precipitation (mm): 920-1,500.
- Frost free days: 174-200.



by far with about 59% of the province's population (about 2.4 million).

The region consists of the flat lower Fraser Valley, associated uplands, and the mountains that border them. It also encompasses part of the adjacent mainland coast connected to Vancouver by the coastal ferry system, as well as the Squamish and Lillooet River valleys that are linked to Lillooet through Anderson and Seton Lakes.

The Lower Mainland is the leading centre for many of the activities in the province, including manufacturing, services, trade, farming and fishing. In the Abbotsford-Chilliwack area, agriculture is the dominant resource activity.

The Lower Mainland-South Coast region covers an area of 3,733,052 ha, of which 250,731 ha (or 5.3%) are within the Agricultural Land Reserve (ALR). The latter portion represents 4.1% of the total provincial ALR (4,764,634 ha).

Land

The most fertile lands are located in the Fraser Valley. About 70,000 ha of the region's farmland is under cultivation, with the chief land-extensive crops in perennial forages (e.g. grasses and legume) primarily to feed the large dairy herds in the region. Considerable acreages are also planted with vegetables and berry crops.

Agriculture

Agriculture is a large industry in the Lower Mainland-South Coast region, with over one-half of BC's farm production value. Dairy products produce the greatest revenue of agriculture production and account for nearly one-quarter of farm cash receipts,

Population	2,436,596
Number of Farms	5,410
Land in ALR	250,731 ha
Area of Farms	118,090 ha
Total Farm Capital	\$11 billion
Jobs	555,343 weeks paid labour annually
Gross Farm Receipts	\$1.66 billion
Annual Farm Wages	\$310 million

The Mainland-South Coast Region

The Mainland-South Coast region is geographically the smallest region, with only 4.2% of the province's land area. It is, however, the most populous region

followed by poultry. The region also generates substantial revenues from greenhouse, nursery, vegetable and berry crops.

Vancouver is BC's largest city with about 2.1 million people in the metropolitan area. It is located at the west end of the Fraser Valley, which has the richest agricultural land in the province. As a result, urban expansion and development pressures on adjacent farmlands have resulted in the loss of farmland, land-use conflicts, nuisance restrictions on some types of agriculture (livestock, berries and greenhouses), land-use allocation issues and high land prices.

Water management is a major issue. There are drainage and irrigation challenges in several areas, and ground and surface water quality concerns throughout the region. Agricultural producers are required to follow environmental guidelines and proper practices in drainage and irrigation as well as waste management to protect groundwater.

With a large population base so close to the United States border, this region is seen as a good market for American imports, especially fruits and vegetables. This often affects prices of local

products, making it challenging for local producers to compete with the large volumes of American imports during the peak summer crop season. The close proximity to the United States also results in cross-border buying of agricultural products, such as milk, and the loss of sales of BC products.

There are several factors that contribute to the significance of agriculture in this region. Mild climate, the diversity of crops, nearby areas of large and increasing populations, the ethnic diversity of populations, and the proximity to export markets (e.g. the United States and Asia) contribute to stable markets and the development of significant niche markets. Well-developed transportation systems enable rapid and lower cost movement of commodities.

A high level of technology is already in place in most sectors including greenhouse vegetables, floriculture, nursery, dairy, and poultry. Many of these industries use advanced technology in crop nutrition, climate control, plant and animal health, marketing and management. Being close to universities and research centres (e.g. Agriculture Canada) further facilitates product and



technology development. Access to food processors helps increase the production of higher value-added products for other markets.

Some sectors have potential for growth. These include the production of greenhouse vegetables on a ear-round basis which can help balance seasonal field vegetable production. Additional floriculture and ornamental production will help meet the demands of increasing populations and residential development. Other areas of potential are specialty vegetables to meet the needs of an ethnically-diverse population, and crops that benefit from the south coast's unique climate and soil conditions (e.g. cranberries, raspberries or nuts).

Among livestock commodities, broilers and dairy production have potential for growth due to expanding populations. Finally, agriculture has increasing tourist potential due to the scenic value of farmlands as part of the landscape. The influx of tourists can also result in increased direct farm sales of products and services (e.g. bed and breakfast, farm tours) to augment farm income.

Wholesale/Retail Markets

The food retail and food service industries are very important in the province. BC accounts for over 12% of the national receipts in the food service sector, with revenue of about \$2 billion annually. Of particular interest is the fact that BC accounts for 14% of national receipts from taverns and 13% of caterers' receipts. Tourism is a major factor contributing to BC's high performance in these areas. The total value of sales from retail food outlets in metropolitan Vancouver is about \$2.3 billion each year.

Food Processing

The Mainland-South Coast Region is the provincial

leader in the food and beverage processing sector with annual shipments valued at about \$2.8 billion. This makes up about 87% of the total provincial value of food and beverage shipments. Over \$530 million of this is from seafood processing, the majority of which is salmon. There are about 260 food-and-beverage processing facilities in the south coast, not including seafood processors. There are about 90 fish processing facilities in the Lower Mainland.

The key to increasing the value of the food processing sector in all regions is increasing the value of the finished product, by specializing and producing gourmet or luxury products. Specialties such as salmon paté and gourmet dairy products are examples of these.

Selected Crop and Livestock Inventories (2006 Census)

Grains	2,700 ha
Corn for silage	8,617 ha
Hay and Pasture	48,000 ha
Sunflowers	8 ha
Alfalfa	4,861 ha
Hay	22,123 ha
Potatoes	2,579 ha
Fruits, Berries and Nuts	9,078 ha
Field Grown Vegetables	5,388 ha
Nursery Products	3,002 ha
Sod	468 ha
Greenhouses	4,443,068 m ²
Mushrooms	219,941 m ²
Christmas Trees	524 ha
Hens and Chickens	15,476,410
Cattle and Calves	127,701
Pigs	100,476
Sheep	9,074
Horses and Ponies	9,331
Rabbits	12,000
Goats	5,106

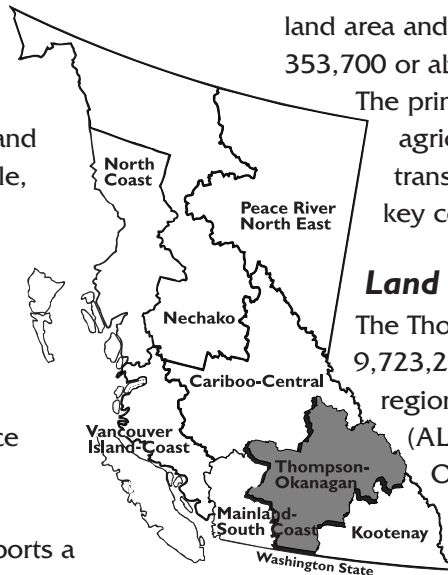
Estimated Gross Farm Receipts (2006 Census)

Community	Number of Farms	Gross Farm Receipts
Fraser Valley Regional District	2,567	\$921,425,274
Greater Vancouver Regional District	2,618	\$728,604,105
Squamish-Lillooet Regional District	129	\$7,891,384
Sunshine Coast Regional District	96	\$2,583,742

Thompson-Okanagan Region Agriculture Profile

Key Features:

- Mild climate with low annual precipitation.
- Production varies from fruit and vineyards to field crops, cattle, hogs and poultry.
- Commercial, farm-gate and estate wineries produce award-winning premium wines for markets across North America.
- Commercial orchards produce over half of Canada's apple exports.
- Good quality rangeland supports a thriving cattle industry.
- Small aquaculture industry provides trout-for-fee fishing and for commercial sale.
- Frost-free days: 148-175.
- Annual Precipitation (mm): 257-534.



land area and has an estimated population of 353,700 or about 12% of the provincial total.

The primary industries are forestry, mining, agriculture and tourism. Manufacturing, transportation and trade services are also key contributors to the economy.

Land

The Thompson-Okanagan region covers 9,723,230 ha. About 8.2% (793,153 ha) of the region is in the Agricultural Land Reserve (ALR). This is 17% of the provincial ALR.

Over 91,000 ha of farmland are under crops. Approximately 9,000 ha is orchard. All types of tree fruits are grown, although apples are the main crop. Grapes for the wine industry are also dominant, and support the revitalized wine sector in BC. In the Okanagan, most agriculture is in the major valleys around Keremeos, from Osoyoos to Mara including Oliver, Penticton and Kelowna, and from Vernon east to Lumby.

Agriculture

Cattle ranching is important throughout the region, particularly in the Thompson and Nicola Valleys. Most ranching in this region is dependent on the use of forest Crown range for summer grazing. Ranching and logging are integrated and compatible uses of this land.

The Southern Interior area is classed as semi-arid, therefore agricultural production is dependent upon irrigation, except in the north east area. Livestock production is predominant in this area, with a number of feedlot operations. Other specialty crops, such as ginseng, are also grown as a result of the climatic and geographic characteristics.

Population	491,479
Number of Farms	5,700
Land in ALR	793,155 ha
Area of Farms	713,986 ha
Total Farm Capital	\$6.5 billion
Jobs	177,407 weeks paid labour annually
Gross Farm Receipts	\$450 million
Annual Farm Wages	\$96.7 million

The Thompson-Okanagan Region

The Thompson-Okanagan region covers the Okanagan, Similkameen, Nicola and Thompson Valleys, as well as the Trans Canada Highway-CP Rail and CN Rail corridor from Revelstoke to the Fraser Canyon at Lytton. It contains 10% of the provincial

Vineyards, orchards and cattle are a traditional part of the region's character.

The region generally has very good agricultural land and the Okanagan is ideal for tree fruit production. Intensive agriculture takes place in the valleys of the Okanagan, Similkameen, Shuswap and Salmon Rivers. Apples, grapes and 96% of BC's soft fruits are grown in the south-central Okanagan. Further north in the Kelowna-Vernon area, apples are the main tree-fruit crop. Fruit processing companies and wineries are common in this area.

In the North Okanagan and Columbia Shuswap areas, livestock operations, dairy production, grains and forage crops are the prevalent types of agriculture. The numbers of dairy cattle have increased significantly over the past 10 years, and one processor expanded its milk-processing facility in 1996. The dairy industry in the North Okanagan generates more cash receipts than any other commodity.

The natural grasslands and improved pastures of the Thompson-Nicola area support forage production and cattle ranching. Ginseng and other specialty operations are also suited to this area. Ginseng is becoming a major crop in this area with one of the larger operations in the country located near Merritt. Several smaller operations



also exist throughout the region. Ginseng products are sold mainly to the Asian markets, although there is a developing market in Canada. There is active investigation into and development of other specialty commodities in this area.

Cattle producers benefit from high quality range suitable for livestock grazing and feeding. There is a potential for growth in cattle backgrounding operations, which involve the feeding of younger animals to a more mature stage, for feeding in a feedlot. Some new feedlots have been established. Land tends to be relatively expensive in this area due to pressure for residential development, especially around major centers. The cost of land can be as much as double the provincial average. Availability of water for irrigation is also a problem in some areas. The region is very dry, and improvement of land by irrigation and the ongoing use of irrigation is costly.

In the future, the rising cost of transportation may decrease the amount of inexpensive, imported produce sold in the region. This could improve the economic viability of irrigating land, for production of more agricultural crops such as storage and fresh vegetables. There is a growing trend to direct marketing of some crops to the local population, particularly vegetables. Tourism and a growing population provide a large market for local production. Farms, orchards and vineyards are becoming more closely integrated with tourism activities in the region.

Food Processing

Food and beverage processors sold about 7% of the provincial total. A total of about 900 full-time jobs are supported by these manufacturers. The fruit and alcoholic-beverage processors are the largest employers and play a vital role in the grape and tree fruit industry. Successful fruit juice firms, and producers of other specialty fruit products that are by products of the fruit industry (sweets, jams, fruit leather) have been established.

Wineries in the region have steadily increased sales and the quality of BC-grown products. Wineries produce a competitive line of award-winning wines under the VQA label. VQA wines are produced in accordance with Vintner Quality

Alliance Standards that are 100% British Columbian. These wines are gaining international recognition. Estate wineries are usually small and producer-owned. They must produce wine made mostly from their own grapes.

The keys to continued growth and viability of the wine industry in BC are an aggressive marketing campaign and continued improvement of the quality of BC wines.



Selected Crop and Livestock Inventories (2006 Census)

Grains	6,500 ha
Corn for silage	2,100 ha
Hay and Pasture	437,000 ha
Alfalfa	43,940 ha
Hay	16,738 ha
Potatoes	104 ha
Fruits, Berries and Nuts	9,533 ha
Field Grown Vegetables	752 ha
Nursery Products	676 ha
Sod	161 ha
Greenhouses	226,110 m ²
Christmas Trees	306 ha
Hens and Chickens	1,782,900
Cattle and Calves	217,269
Pigs	5,984

Sheep	16,108
Horses and Ponies	14,005
Rabbits	2,600
Goats	3,116

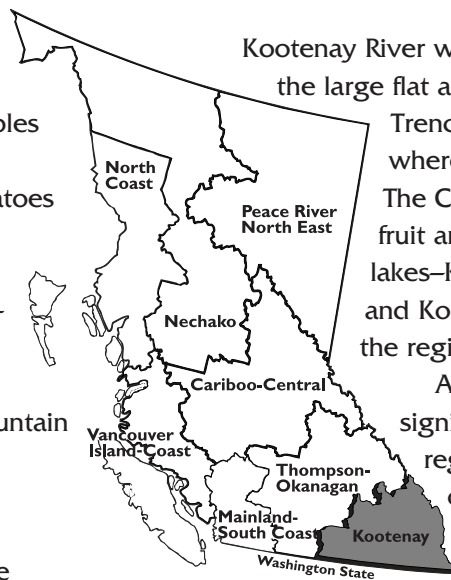
Estimated Gross Farm Receipts (2006 Census)

Community	Number of Farms	Gross Farm Receipts
Regional District of Central Okanagan	1,017	\$86,228,375
Columbia-Shuswap Regional District	624	\$40,394,994
Regional District of North Okanagan	1,227	\$111,383,177
Regional District of Okanagan-Similkameen	1,621	\$125,501,492
Thompson-Nicola Regional District	1,211	\$86,726,187

Kootenay Region Agriculture Profile

Key Features:

- Moderate climate supports a wide range of crops such as apples and cereals, as well as many vegetable crops, including tomatoes and cabbage.
- Frost-free days: 110-160.
- Annual precipitation (mm): 370-569.
- Agricultural land is scattered through major river valleys, mountain slopes and grassland ranges.
- Ranching dominates agricultural activity.
- Meat, honey, fruit and vegetable processors utilize local product.



Kootenay River waterways). Agriculture dominates the large flat areas located in the Rocky Mountain Trench and the Grand Forks area, where cattle ranching is prominent. The Creston Valley is well known for its fruit and vegetable industry. Five large lakes—Kootenay, Arrow, Slokan, Duncan and Koochanusa—cover extensive areas of the region.

Agriculture and manufacturing make significant economic contributions regionally, as do growing populations of retired people in areas such as Creston, Nelson and Grand Forks. As the economy diversifies, tourism and the service industry are becoming substantial contributors. Cranbrook is the regional center for trade and services in the eastern part of the region, while Nelson serves as the main administrative center for the west Kootenay area.

Population	142,110
Number of Farms	1349
Land in ALR	384,759 ha
Area of Farms	178,260 ha
Total Farm Capital	\$1.27 billion
Jobs	29,366 weeks
	paid labour annually
Gross Farm Receipts	\$69.0 million
Annual Farm Wages	\$15.2 million

The Kootenay Region

The Kootenay region is located in the southeastern portion of the province, with the United States to the south, Alberta to the east and the Okanagan to the west. It represents 6.7% of the provincial land area and contains 3.5% of the population. A series of north-south valleys are separated by high mountain ranges and contain a number of reservoirs for power-generating facilities (Columbia and

Land

The Kootenay region covers an area of 5,902,490 ha, of which about 6.5% (384,759 ha) is within the Agricultural Land Reserve (ALR). This represents about 8% of the total provincial ALR. This region includes the lowlands of the Columbia and Kootenay Rivers. Agriculture is scattered throughout the region, in the major valleys. Mountain slopes and grassland ranges provide summer grazing for livestock; hay and cereal crops are grown (as winter feed for livestock) in the valley bottoms.

Agriculture

The agriculture sector of the Kootenay region accounts for 2.6% of the farm gate value of sales

in the province. Sales from approximately 1350 farms in the region approach \$69 million each year. Ranching is the primary activity of most of the farms. Fruit, field crops and poultry are also important products. There is extensive rangeland in the East Kootenays. In addition to the rangeland, there is a significant amount of land not under cultivation that has potential for perennial forage crops for livestock. The availability of abundant land for range and forage production makes possible significant future expansion of livestock farming. Natural resources from the land base (grazing land, water, recreational land, forest production, etc.) are managed in an integrated fashion, respecting the unique requirements and contributions of each.

Imported produce is subject to the relatively high costs of transporting commodities into the region. This tends to help local production and marketing of horticultural crops. However, local farmers usually face higher transportation costs for their products and are thus at a disadvantage when selling to the large Lower Mainland market. The topography of the Kootenays is very rugged. Horticulture is therefore largely confined to the sides and bottoms of the valleys. Stony soil and poor moisture-holding capability restrict cultivation on much of the ALR holdings. Roughly 140,000 ha, about one-third of



the ALR in the region, is of the lower quality soil classifications (Classes 5, 6 and 7).

Food Processing

The food and beverage processing sector in the Kootenays is small, but diverse. Meat, honey, fruit and vegetable processors use local products. There are processing facilities for dairy products, brewing, and livestock feed in the region. There are about 300 people working in the food processing sector.

The high cost of transporting goods to market from the Kootenays is an incentive to produce high-value products in the region instead of shipping out unprocessed commodities. There are also opportunities to expand local processing of fruits and vegetables that are currently processed in the Okanagan.

Selected Crop and Livestock Inventories (2006 Census)

Grains	3,500 ha
Corn for silage	334 ha
Hay and Pasture	124,000 ha
Alfalfa	15,528 ha
Hay	6,857 ha
Potatoes	350 ha
Fruits, Berries and Nuts	398 ha
Field Grown Vegetables	167 ha
Nursery Products	380 ha
Greenhouses	49,837 m ²
Mushrooms	250 m ²
Christmas Trees	2,201 ha
Hens and Chickens	23,713
Cattle and Calves	47,871
Pigs	483
Sheep	2,500
Horses and Ponies	3,833
Rabbits	600
Goats	665

Estimated Gross Farm Receipts (2006 Census)

Community	Number of Farms	Gross Farm Receipts
Regional District of Central Kootenay	562	\$30,004,374
Regional District of East Kootenay	395	\$15,570,846
Regional District of Kootenay Boundary	392	\$23,442,296