

INDUSTRY PROFILE

British Columbia's agri-food and seafood industry includes primary production in agriculture, aquaculture, and commercial fisheries, as well as in the processing of food and beverages. The province's diverse landscape, climatic zones, geographical features, and coastline support a diverse agri-food and seafood industry, and as a result, many of BC's commodities are considered specialty products, as they are unique from those of most other provinces in Canada.

Agriculture

Agriculture is an applied science that uses water, energy (heat and light), and soil nutrients to grow plants, raise animals, and rear fish for food and other related products. Today's agriculture uses a combination of advanced technology and sound agricultural practices to provide fresh quality products to the consumer.

Only 5% of the total provincial land base is considered arable or potentially arable, although up to 30% of the province has some agricultural potential. Farm holdings (17,528 farms in 2016) cover 2.6 million hectares. Of this, 580,820 hectares are in crops and 1.6 million hectares are for pasture or grazing. More than 34 million hectares — approximately one-third of BC's land base — are managed by the province for rangeland ecosystem health, wildlife habitat, and forage production. BC is unique among jurisdictions managing rangelands, because the majority of the province's rangelands are in forests and not open grasslands. Approximately 82% of these Crown rangelands are forested.

All arable soils have been mapped and classified on the basis of quality (Class 1 through Class 7, with Class 1 being the best suited for soil-based agriculture and Class 7 being the least suited), and the best classes have been placed within the Agricultural Land Reserve (ALR) to be preserved for agricultural and related purposes. Slightly over 4.6 million hectares of land in BC are in the ALR.

According to the 2016 Census of Agriculture, the average farm had an area of 148 hectares. However, farm size varies greatly, depending on the type of activity. Agriculture in British Columbia is diverse and includes dairy farming, cattle ranching, and poultry raising, as well as the growing of tree fruits, vegetables, berries, grapes, mushrooms, bulbs, ornamental flowers, and shrubs. The total estimated Gross Domestic Product (GDP) for crop and animal production (excluding aquaculture), plus support activities, amounted to \$1.9 billion and accounted for 0.8% of BC's total GDP in 2017.

Livestock and Related Products

The largest single component of the agriculture industry, in terms of assets and annual revenues, is the dairy industry. Other livestock industries of key importance are beef cattle and poultry farming. Large dairy herds are concentrated in the Lower Mainland/Fraser Valley, the North Okanagan-Shuswap area, and on southeastern Vancouver Island. Smaller herds are found near Creston, Smithers, Vanderhoof, Prince George, Dawson Creek, and Fort St. John.

Cattle ranching is carried out primarily on the rangelands of the Southern and Central Interior, the Peace River region, and the Kootenays. However, beef cattle are raised throughout the province on large and small operations. There are about 400,000 hectares in forage production, along with 1.6 million hectares of pasture, that support the livestock industry.

Hog and poultry production remains concentrated in the Lower Mainland/Fraser Valley and on the coast, with the remainder located in the Interior and Peace River regions. BC produces turkeys, chickens, eggs, sheep and lambs, wool, honey, game products such as bison, and many other livestock-related products across the province.

Fruit, Vegetables, and Field Crops

Crops of major importance to BC's agriculture in terms of annual value include greenhouse vegetables, floriculture and nursery crops, mushrooms, berries and grapes, and tree fruits. The Southern Interior, principally the Okanagan, is well suited to the production of tree fruits and grapes. The cooler and wetter climate of the lower Fraser Valley and southern Vancouver Island favours the production of berries and vegetables. Most of BC's potatoes, vegetables, mushrooms, berries, floriculture, and nursery crops are produced on the rich soils and flat terrain of the Fraser River Delta. This soil is considered to be among the richest in Canada. The majority of BC greenhouses are also located in this region.

The Peace River region is an extension of the prairie-like terrain of Alberta and is well suited to grain and oilseed crops because of its topography and climate. As a result, most of the province's grain and oilseed are grown in this region, although some grain is also produced in the Kootenay area.



Photo courtesy of the BC Ministry of Agriculture — greenhouse peppers

Seafood

The seafood industry is comprised of three principal economic components: commercial fishing, aquaculture, and seafood processing. About 100 species of finfish, shellfish, and marine plants are grown, harvested, and marketed by British Columbia's seafood industry. Total sales of primary seafood production in BC was \$1.2 billion (landed and farm gate value) in 2017. The top 10 seafood commodities in terms of landed values were farmed Atlantic salmon, halibut, wild salmon, geoduck and other wild clams, crabs, prawns and shrimp, wild sablefish, herring, rockfish, and hake.

In 2017, the seafood industry provided full and part-time employment for more than 4,500 people.

Aquaculture

Aquaculture is the farming of finfish, shellfish, and plants in marine or fresh water. With its climate, good water quality, and sheltered bays, British Columbia's coastline is well suited for aquaculture.

Aquaculture operations can be commercial — raising species for sale — or non-commercial — raising species for personal use. It is a significant contributor to the provincial economy, and most aquaculture jobs are located in coastal communities.

In 2017, there were 690 operations licensed to farm finfish, shellfish, and marine plants in BC, with a harvest of 96,500 tonnes and a landed value of \$768.2 million. BC exported \$512 million in farmed Atlantic salmon in 2017.

Salmon farms are primarily located in and around the northeast and west coasts of Vancouver Island. For the most part, marine shellfish farms are located on the west coast of Vancouver Island and around the Georgia Basin, with major concentrations in the Baynes Sound, Cortes Island, and Okeover Inlet areas. The industry's freshwater trout farms and salmon hatcheries are located all around the province, with major concentrations in the Lower Mainland and the Thompson-Okanagan area.

Aquaculture provides opportunities for many small businesses, such as manufacturers of nets, net pens, floats, anchors, and other equipment. Other related businesses include feed suppliers, broodstock development, disease management services, and specialist consulting services. There are also value-added industries involved with fish farming, such as those dealing with transportation, processing, and packaging.

British Columbia is the fourth largest producer of farmed salmon in the world after Norway, Chile, and the United Kingdom. The primary salmon species cultured in BC is Atlantic salmon. Other fish species cultured in marine waters include chinook, coho, and steelhead salmon, as well as sablefish.

The Pacific oyster and Manila clam are the predominant species of shellfish cultured in BC. Other species farmed in smaller quantities are scallops, mussels, geoduck and varnish clams, and crayfish.

Freshwater aquaculture consists of three different types of operations: fish hatcheries, fish ponds, and “U Catch’em” operations. The hatcheries provide the juvenile fish for both the fresh and saltwater fish farms; the ponds produce primarily rainbow trout for retail food market sales; and the “U Catch’em” operations are privately owned, recreational trout fee-fishing sites. Other freshwater finfish species cultured in BC are sockeye salmon, sturgeon, tilapia, Arctic char, carp, and other trout.

There is also a small marine plant industry in the province, primarily culturing kelps and microalgae.

Commercial Fishing

Commercial fishing is the fourth largest primary industry in British Columbia after forestry, mining, and agriculture. More than 100 species of finfish, shellfish, and plants are harvested commercially, with a landed value of \$410.2 million in 2017. Groundfish species (primarily halibut, rockfish, and sablefish) generate the largest share of the value, followed by wild shellfish (crabs, geoduck clams, and prawns), wild salmon, and herring.

Harvesting is undertaken by vessels using seine or gillnets and by trawling, trolling, or trapping. Other harvest methods include diving and hand-picking. Many fisheries have become limited entry, which allows for year-round harvesting, higher quality products, and increased values. High prices are realized primarily in the geoduck clam, crab, and prawn fisheries. New and emerging fisheries are being developed to increase diversification of the harvesting sector while providing opportunities for enhancing the value of underutilized species.

Both federal and provincial authorities exercise control over the industry. The Federal Department of Fisheries and Oceans assumes responsibility for the protection and conservation of fisheries and the management of aquaculture. The provincial government issues leases and licences of occupation for the aquaculture sites to utilize Crown land.



Photo courtesy of the BC Seafood Alliance — boat heading out to harvest

The seafood industry operates all along the British Columbia coast. Major concentrations of seafood processing plants are in the Lower Mainland, on Vancouver Island, and in the Prince Rupert area. The fleet, excluding packers and floating processors, is made up of about 2,400 vessels.

Seafood Processing

Seafood processing occurs throughout the province in about 140 facilities, many of which are located close to the fishing grounds or to distribution centres. Prince Rupert on the north coast, Vancouver Island, and the Lower Mainland on the south coast are the three primary regions in BC for seafood processing. A total of 180,996 tonnes of processed seafood was shipped to 73 international markets in 2017, with a total export value of \$1.3 billion. Sixty percent of the exports were to the United States and 20% were to China.

The seafood farming, harvesting, and processing sectors provide jobs and economic opportunities for coastal communities throughout the province, with a history of successful partnerships with many First Nations.

Food Processing

The BC food and beverage industry plays a significant role in the provincial manufacturing economy. It generated sales of \$9.8 billion in 2017 and provided 32,600 jobs. The industry is dominated by a large number of small- and medium-sized firms, which provide operational flexibility by responding to shifts in consumer tastes and preferences.

The diversity of BC's production — over 200 primary agriculture products and about 100 fish, shellfish, and marine plant species — provides a broad foundation for processing.

This enables the BC food and beverage industry to specialize and produce a wide selection of products for domestic and export markets.

In 2017, the top sales were: \$1.7 billion in “other food processing”; \$1.5 billion in meat and poultry products; \$1.2 billion in dairy products; \$1 billion in bakeries and tortillas; \$0.8 billion in animal food products; \$0.7 billion from breweries; \$0.7 billion from wineries; \$0.6 billion in fruit and vegetable products; and \$0.4 billion from soft drink and ice processing.

The majority of food processing firms are located in the Lower Mainland/Fraser Valley, with some in the Thompson-Okanagan area and on Vancouver Island. Locations are selected for their proximity to labour and raw material supplies and are well positioned geographically to benefit from new marketing opportunities in the US and Pacific Rim markets.

Due to its excellent transportation and communication infrastructure, established supporting industries, abundant energy, water, and other natural resources, diversified agri-food and seafood base, and its strategic location on the Pacific Rim, the BC food and beverage industry is a strong competitor in domestic and export markets. It also plays an important role in the movement of commodity and food products from other parts of Canada to world markets.