



## The Canadian Greenhouse Vegetable Sector

### One of the great success stories of Canadian agriculture

Over the past decade, the greenhouse vegetable sector has experienced strong growth to become the largest and fastest growing segments within Canadian horticulture. The sector's growth is being achieved by passionate farmers and marketers who support research, rely on innovation, and respond to growth opportunities as they invest into their infrastructure, employees, and communities. Canada's greenhouse farmers are deeply committed to growing safe, healthy, high-quality, and sustainable fresh vegetables that are available virtually year-round to consumers here and abroad.

### Greenhouse fruit and vegetable production and sales

Greenhouse fruit and vegetables accounted for \$1.6 billion in farm cash receipts in 2019, an increase of 5.0% from 2018. Sales of greenhouse fruit and vegetables have increased for the sixth consecutive year.

Canadian greenhouse vegetables are grown on over 838 farms located across Canada. Ontario continues to lead with 65% of the farm gate sales, followed by British Columbia (19.2%), Québec (9.3%), Alberta (5.4%), and other regions (1.1%). Greenhouse tomatoes accounted for \$588 million (37%) of the total greenhouse fruit and vegetables sales in 2019. Cucumber sales rose 10% to \$485 million. Pepper sales totaled \$441 million (28%), lettuce: \$35 million, eggplants: \$10 million, fresh fine herbs: \$10 million.

### Greenhouse Vegetable Trade and Market Development

Canadian greenhouse vegetable exports rose 4% to reach over \$1.0 billion in 2018, accounting for 42% of all fresh produce (fruit, greenhouse and field vegetables, potato) exports. Canadian export of greenhouse tomatoes, peppers and cucumbers (335,714 metric tonnes) continues to be destined mainly to the United States, accounting for 99% of the total export market. During the coldest Canadian winter months, imported greenhouse vegetables are primarily sourced from CUSMA partners: \$286 million from Mexico (86%), and \$34.8 million from the United States (10%). Export markets are being developed in Japan, Taiwan, Hong Kong, mainland China, Singapore, and India.

### Competitiveness in a Global Produce Market

The fresh produce industry is highly integrated across North America and greenhouse vegetable growers face immense pressure to remain competitive in a global marketplace. Canadian cost structures are significantly higher than many of its global competitors. In 2019, operating expenses rose 5% to \$1.25 billion, with labour costs accounting for the largest share of total expenses (31%). New greenhouse construction typically requires 2-3 years of lead-time for planning, and an estimated \$1.4 to \$2 million per acre of initial capital investments depending on the type of infrastructure and scale.

Growers' ability to invest, innovate, and compete internationally relies heavily on bilateral and tri-lateral frameworks to remove tariffs, reduce non-tariff barriers. Farmers are unable to simply pass on rising costs through the supply chain to consumers. The grower's position in the marketplace as price takers vs. price setters on perishable goods emphasizes their reliance on well-designed policies, stable tax regimes, business investment incentives, and continued trade harmonization to remain competitive. The fruit and vegetable industry urgently needs complementary legislation to the Bankruptcy and Insolvency Act with limited statutory deemed trust provisions for fruit and vegetable growers to be adopted.

## **State of the art greenhouse production systems**

Greenhouse vegetables are grown indoors using a soilless growing system, called hydroponics, that ensures water and fertilizer are collected and recycled. Greenhouse growers require heat to extend the growing season and food-grade carbon dioxide to feed their crops. Commercial production facilities are equipped with computerized, climate-controlled systems that ensure optimal growing conditions. Heat, carbon dioxide, water, and nutrients are delivered in measured amounts; increasing yields while reducing water use and crop inputs. Increasingly, greenhouses are investing in supplementary lighting systems that are required for 12-month production.

## **Stewardship for healthy crop, healthy people, healthy planet**

Canadian greenhouse vegetable growers' early adoption of technology and innovation extends to their use of highly specialized Integrated Pest Management (IPM) programs. Healthy crops rely on multiple strategies to limit the risk of insect pests and plant diseases from entering and spreading within the crop, including: the introduction of biological pest controls and beneficial predatory insects, physical traps or screens, biosecurity plans, and end of season clean-out and sanitation. Use of traditional pesticide products is very limited. Growers are committed to being responsible employers, accountable environmental stewards, and good neighbors.

Each greenhouse has strict policies in place to meet and exceed regulations, voluntary and mandatory standards, and buyer specifications. Audited, third-party certified food safety programs ensure perishable fruit and vegetables are grown, harvested, packed, and shipped a manner that preserves freshness and reduces food waste. Growers take pride in producing safe, high-quality food for millions of families worldwide.

## **Canadian greenhouse employers are economic drivers**

The greenhouse industry<sup>i</sup> is Canada's largest agricultural employer but also faces the largest labour gap. In 2017, the industry employed 52,000 people, or roughly 15% of the total agricultural workforce. With the number of jobs expected to grow to 71,000 jobs in 2025, and fewer Canadian residents available, the greenhouse industry labour gap is expected to rise to 26,600 jobs by 2025, or 37% of the total workforce required to meet the market demand for industry products<sup>ii</sup>. Future automation tools will help to reduce labour shortages that otherwise result in losses to farm revenue and food supply.

Specifically, in 2019, the greenhouse vegetable sector employed a total of 12,492 people, of which 5,145 were seasonal employees. Every effort is made to employ Canadians first, but as the available jobs are often in rural settings, for a set number of weeks, and for work that requires physical labour, the pool of available Canadians simply hasn't met the need. Growers value the skill, experience, and cultural diversity their international guest workers bring to the farm year after year.

## **The Canadian Horticultural Council is the voice of fruit and vegetable growers**

The Canadian Horticultural Council represents the national interests of the greenhouse vegetable sector. Together with its greenhouse vegetable members from across Canada, CHC works closely with a range of stakeholders and government partners to help inform policy decisions, maintain and enhance market access, and ensure an innovative, competitive sector with a strong growth agenda.

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<sup>i</sup> In this case, the reference to the "greenhouse industry" includes greenhouse, nursery, and floriculture sectors.

<sup>ii</sup> [https://cahrc-ccrha.ca/sites/default/files/files/Labour-Employment/factsheet\\_GREEN\\_E.pdf](https://cahrc-ccrha.ca/sites/default/files/files/Labour-Employment/factsheet_GREEN_E.pdf)