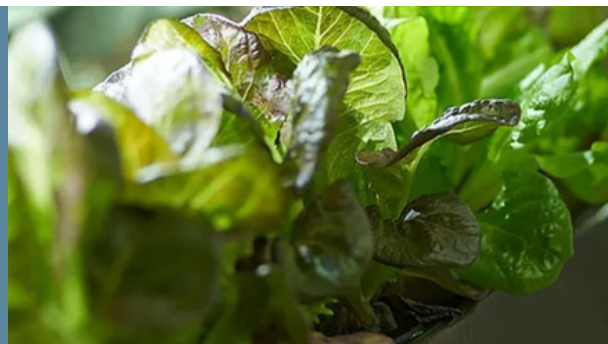


ATYPICAL AGRICULTURE INDUSTRY WORKSHOP

Guiding responsible innovation in the
province of British Columbia



SUMMARY

Challenges

- Trade and supply uncertainties
- Uneven landscape for new entrants
- Inconsistent terminology for atypical agriculture

Opportunities

- Need for provincial and national self-sufficiency
- Enhanced university-company collaborations

OBJECTIVES

This summary document presents the high-level results from the second of a series of workshops to connect atypical agriculture stakeholders. The goals of this workshop series are to facilitate collaboration, identify hurdles for industry development, and establish groundwork for future connections for the atypical agriculture sector.

This research aims to support an environmentally, economically, and socially desirable direction for atypical agriculture, advancing more responsible agri-tech innovation pathways in partnership with industry, government, and community food organizations.

For this work, we define atypical agriculture as practices involving indoor, vertical, controlled environment growing of vegetables, culinary herbs, mushrooms, fruits, and berries.

APPROACH

On January 22, 2025, the research team hosted an online workshop via Zoom with a total of eight industry representatives from five companies, representing a majority of industry players in British Columbia and western Canada.

Key tensions and opportunities guiding atypical agriculture development were discussed across the following themes:

Skills and Training

Current labour challenges and opportunities facing the sector

Government and Regulation

Challenging and/or successful incentives, regulations, and governing bodies for atypical agriculture

Supply Chain

Concerns and opportunities fostered through a changing political environment in Canada and North America

Shared Research Needs

Key industry-wide needs from academia

We all have business to run and we all have proprietary technology,



but we've always been of the belief that the more of us [working together] the better.

**Workshop
Participant**

Vertical Farm
Co-Founder

STRENGTHS

Atypical agriculture has received substantial attention in recent years from government, media, and funders, generating much excitement. Despite a lack of clear direction or unified support from the government, the sector has received some federal funding support as well as municipal flexibility in allowance for agricultural operations across different land uses, and competitive energy rates. Food safety and quality supports are strong and available for growers. The companies that have weathered industry-wide uncertainties since the pandemic are well-equipped to lead the sector into the future.

- Some government financial support and regulatory flexibility
- Established companies with strong reputations

... There are lots of companies, as you all know, who couldn't make a go of it. So, yeah, what we're doing, I want to congratulate everybody that's on here, and all the entrepreneurs that are surviving.

Workshop Participant

Vertical Farm
Co-Founder

WEAKNESSES

Now 'greenhouse' is no longer the term that [the municipal government] would use to define us... So it's just really hard to figure out how to describe ourselves and figure out what regulations we have to follow.

Workshop Participant

Vertical Farm - Founder

Workshop participants identified lack of consistent terminology for atypical agriculture (specifically vertical agriculture) as a key barrier for the sector. This makes it challenging to follow regulations or access supports from government or associations. Additionally, there is a need for training and skill development that emphasize problem solving and decision-making, rather than just simply technical horticultural skills. Overall, the industry is perceived as 'risky' for investors, government, and the public, given the number of failed companies over the last five years.

- Need for well-rounded growers capable of responding rapidly to problems
- Lack of consistent terminology for atypical agriculture and associated regulatory ambiguities

THREATS

The industry participants identified supply chain uncertainties as a key threat for the industry. High CapEx and infrastructure requirements make it difficult to experiment with new supplies or infrastructures in atypical agriculture. An additional threat is provincial measures that make competing with imports especially challenging. Imported products from California and out-of-province observe less provincial regulatory barriers to enter supermarket shelves compared to BC-grown, vertically produced crops. One such barrier includes the need to market through designated agencies with not-insignificant fees.

- Provincial regulations challenging new entrants
- Supply chain uncertainties and high CapEx requirements

We're competing with the produce that's coming from the United States. The States doesn't have to deal with the same regulatory issues, and that product is just free flowing onto our [grocery store] shelves.

Workshop Participant

Vertical Farm -
Quality Assurance Manager



...having a trusted list of suppliers, the amount of stuff we have to wade through to find the right solution. So if we are able to curate something that we can trust as we go through and contribute to, then the good actors continue and the bad actors don't I think is critical.

Workshop Participant

Vertical Farm - CEO

OPPORTUNITIES

Times of high uncertainty provide for opportunities of growth. While the industry is experiencing substantial challenges from supply chain vulnerabilities, high infrastructure investment costs, and provincial regulatory frictions, there is significant demand for Canadian innovation, technology, and food self-sufficiency, and a market for high quality local product. Cost- and information sharing among industry players can make for a more competitive regional sector.

- High market demand for local, fresh, and clean product
- Need for greater food self-sufficiency within British Columbia and across Canada

SECTOR-WIDE ACTIONS ARISING FROM WORKSHOP

1

Opportunity assessment of industry

- Rigorous analysis of social, environmental, and economic potential of sector to increase transparency public confidence in industry

2

Collaborative procurement and supply database

- Resource sharing to reduce risk to trial new supplies, along with reduced procurement costs

3

Equipment loaning and infrastructure funding

- Convenient and quality equipment security for high CapEx infrastructure

4

Exploration of certification system

- Identify and market key strengths in comparison with organic and traditional agriculture

5

Creating a cohesive sector-wide voice

- Establish set of sector-wide goals and strategy to achieve them

NEXT STEPS

- Identify possible organizational structure for future sector-wide collaborations
- Create responsible atypical agriculture sector development blueprint report

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