



Ministry of
Agriculture, Food
and Fisheries

BC Agritech

Presentation: Peace River Regional District Board

June 24, 2021

OVERVIEW

- Provide an overview of B.C.'s agritech sector
- Share what we have been doing to support the sector and recent successes
- Challenges that may inhibit sector growth



Agritech Definition (Revised)

“Technology and technological innovation in the farm, food and fish sectors with the aim of improving production, profitability and sustainability. The sector includes organizations and businesses involved in development, production, commercialization, and facilitating implementation of products, services, research or applications for farm, food and seafood businesses.”

Assumptions:

- ▶ In scope: companies developing and applying innovative technologies in the farm, food and fish sectors
- ▶ Out of scope: food producers/processors who have adopted agri-technology to improve production, profitability and sustainability

Agri-tech Definition: Sub-Sectors

	Aquaculture Related Technology &/or Services	Biotechnology & Bio-products	Biowaste & Waste Management	Farm Robotics, Mechanization & Equipment	Smart Farming	Surveying & Mapping	Processors	Wholesale & Distribution	Retail
Definition	Developing new technologies for monitoring and grow new types of food in both marine and fresh water environments.	Using biological methods to produce plants, bacteria and animals products with improved traits.	Processing of waste, water and other by-products to reduce harmful substances and convert or re-use materials into new products.	Developing and building equipment used primarily to automate farm work.	Data-based technologies making use of big data and predictive analytics to help farmers make better decisions on daily farm issues.	Providers and developers of aerial surveying and new mapping systems and management application.	The transformation of agricultural products into food, or of one form of food into other forms for consumption by humans or animals.	Companies, organizations & programs that collect food from producers, store it in warehouses, and then distribute the food to retail.	Businesses which sell food directly to consumers to be taken for off-site consumption.
Companies (examples)	<ul style="list-style-type: none"> Archipelago Marine Research Cascadia Seaweed 	<ul style="list-style-type: none"> Ecovatec GrovZorb Okanagan Specialty Fruits Terramera Vitalus WestGen 	<ul style="list-style-type: none"> Enterra West Coast Reduction 	<ul style="list-style-type: none"> Advanced Intelligence Systems BW Global CubicFarms Systems Ecotation Enuvave 	<ul style="list-style-type: none"> Barrel Wise Farm at Hand SemiosBio Skaha Remote Sensing 	<ul style="list-style-type: none"> Swift Aerial Surveys 			

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Why Agritech?

- ▶ Farmers, ranchers, aquaculture, other continue to use and adopt technology and technological innovation to improve the efficiency and output of their production
- ▶ Since 2015, Agri-Tech has grown dramatically in many global economies
- ▶ In many countries, Agri-tech (including processing) is seen as vital to their food security

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Opportunity

- ▶ Spur economic growth in agriculture and agritech
- ▶ Support productivity and competitiveness in agricultural operations
- ▶ Develop made-in-B.C. agritech solutions to improve productivity in B.C., and sell to the world
- ▶ Build an agritech talent pool with good jobs across sectors
- ▶ Climate leadership
- ▶ Improve food security by reducing reliance on imports
- ▶ Revenue for public investment

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Agritech in British Columbia

- ▶ BC home to 160 companies with leading innovations and technologies in agriculture, food processing, and seafood sectors
 - \$500M revenues in 2019
 - 2,200 jobs
 - \$38M in tax revenues
- ▶ Focus on BC agritech has grown from the launch of the Agriculture Venture Acceleration Program in 2014 to the Food Security Task Force (2019).....
- ▶ Province recognizes that technology adoption and integration is vital to food systems, impacting all operations from small-scale to commercial.

FSTF Report: 4 Recommendations

1. Adopt UN Sustainable Development Goals to seek to implement these in future food policies;
2. Establish BC as an Agritech leader by supporting innovation pathway;
3. Create an agriculture and agritech institute; and
4. Ensure there is a place to grow food and support emerging agritech industries by examining land use polices and other regulatory considerations.

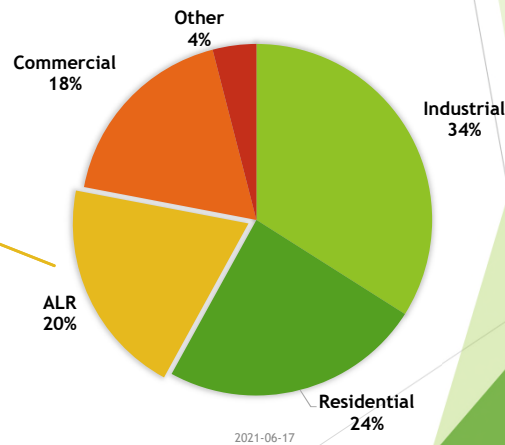


Land Analysis of the Agritech Sector

Some companies have indicated that they need to be on agricultural land so they can:

- conduct field trials
- increase collaboration with the farming community; and
- be able to expand their operation to apply new proprietary technologies

Current land use by agritech companies



Moving Forward

- ▶ MAFF has a lead role in food security and food production.
- ▶ Short term:
 - ▶ It is early in the new MAFF mandate - cross-ministry work is underway to develop a Regenerative Agriculture Network
 - ▶ The BC Agritech Grant Program created as part of the COVID-19 recovery strategy (JERI Lead)
 - ▶ On-going support via the Agriculture Venture Acceleration Program and the Canadian Agriculture Partnership Innovation Programs
- ▶ Long term:
 - ▶ The Province is under discussions with Canada to coordinate R&D, commercialization and business development through IRAP, the new BC model for the WD, SIF; on-going engagement with PSIs to collaborate on agritech institute hub and new undergraduate/graduate programs in agri-tech; continued support international investment inquiries.

Agritech in the United States

Insights for B.C. Agritech

- ▶ US growers have a greater risk appetite for tech-enable solutions
- ▶ US volume of food production is on a global scale (US Strategy)
- ▶ Covid-19 has accelerated demand for farming automation and robotics (creates opportunity for products that can increase yields for high value crops)

Non-obvious US insights for a B.C. Agritech company

- ▶ Agritech began to attract Venture Capital funding 10 years ago, the industry raised \$322 million (2010) increased to \$4.1 billion (2019) - 12X
- ▶ Agritech digital marketplaces have potential to help farmers improve products by reducing input costs and increasing yields
- ▶ Agritech regenerative practices gain momentum (consumer driven)

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B.C.'s Agritech Sector Vision

Becoming a globally competitive supplier of agritech by:

- ▶ Accelerating growth of the agritech sector
- ▶ Continuing to support our strong reputation for R&D
- ▶ Utilizing our diverse range of existing and newly developed technologies
- ▶ Collaboration with our world-class academic network
- ▶ Working alongside international partners and global agritech leaders (e.g. Netherlands and USA)

Supporting B.C.'s Agriculture Sector by:

- ▶ Helping local producers to adopt innovative technology
- ▶ Improving farm resiliency in the face of climate change and a shrinking workforce
- ▶ Increasing productivity and local food supply
- ▶ Being a strong employer of youth, and transitioning workers from other sectors
- ▶ Pursuing technologies that are sustainable and support regenerative agriculture

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Questions?

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