

# Canadian Dairy Industry Overview

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### About Canada

• 2nd largest land mass in the world (9.88M km², ≈7% is arable)

• 20% of world's freshwater resources

Population: 38.3M (ranked 37<sup>th</sup>)

• 10 provinces and 3 territories

• 6 time zones

Official languages: English and French

18% of people are foreign born

• 1.4M are Indigenous

Largest cities: Toronto, Montreal, Calgary,
 Ottawa



# Importance of Agriculture

- Agriculture and agri-food sector employs
   2.1M people = 1 in 9 jobs in Canada
- Generates \$140B of Canada's GDP
- Crops: \$34.4B GDP

Top 3: Canola, Wheat, Corn

Livestock: \$5.4B GDP

Beef / Veal (12.3M head, 72,985 farms/ranches)

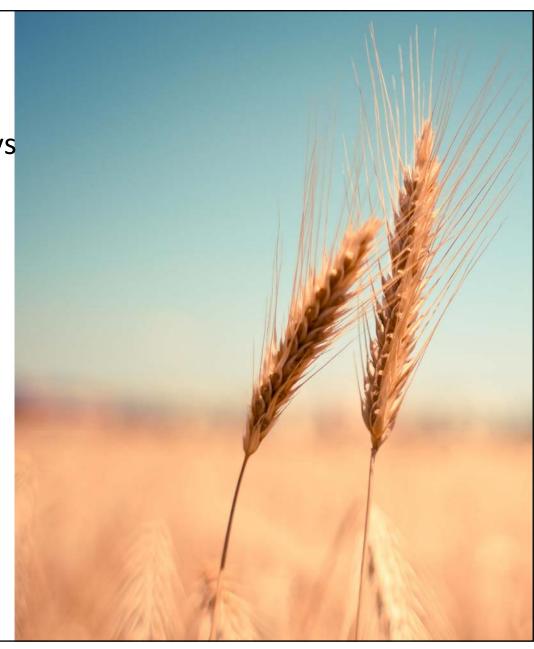
Swine (14.0M head, 7,635 farms)

Dairy (1.4M head, 9,952 farms)

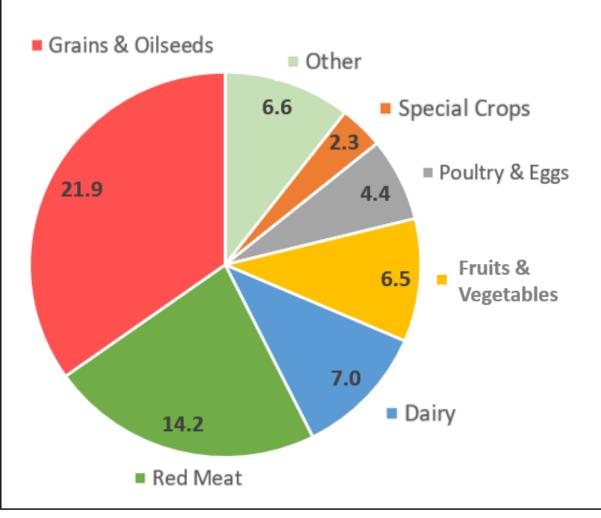
Sheep (796K head, 9,390 farms)

Goats (230K head, 5,627 farms)

Bison (119K head, 975 farms)



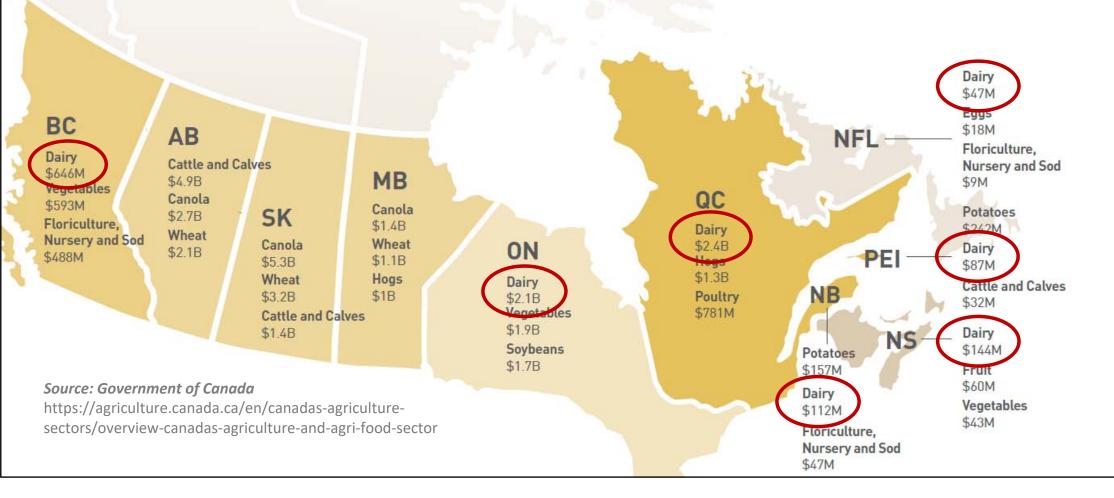
# Farm Receipts (Billion \$, 2019

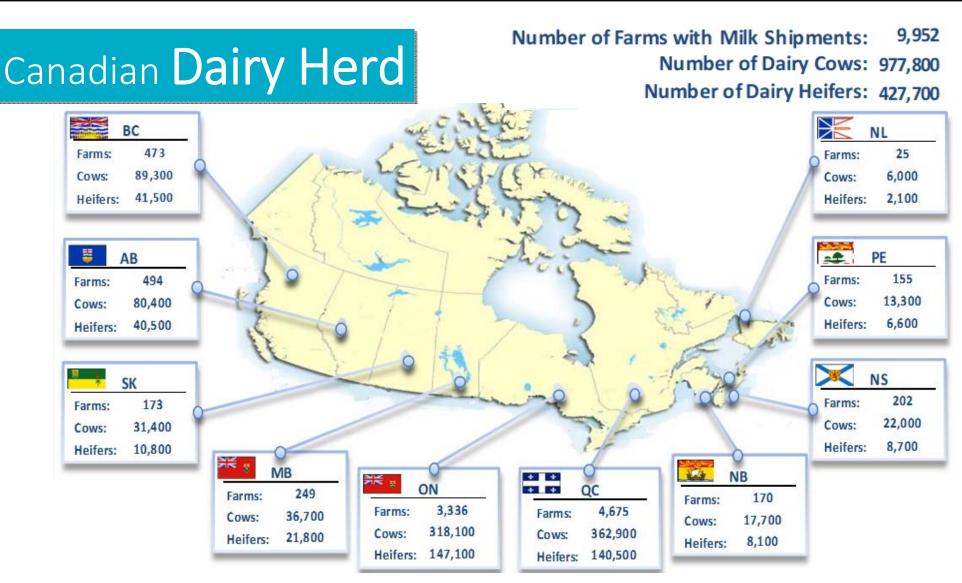




# Top Commodities by Province

#### TOP THREE CROP AND LIVESTOCK COMMODITIES BY AVERAGE 2016-2020 FARM CASH RECEIPTS



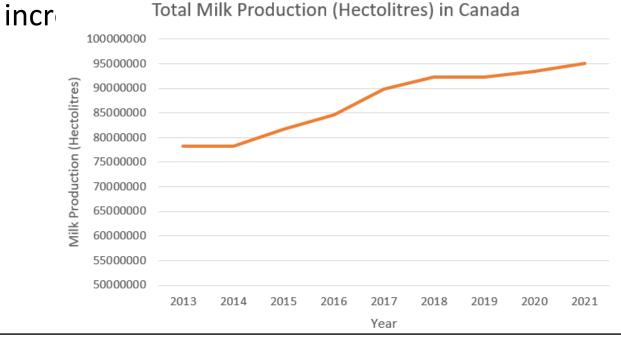


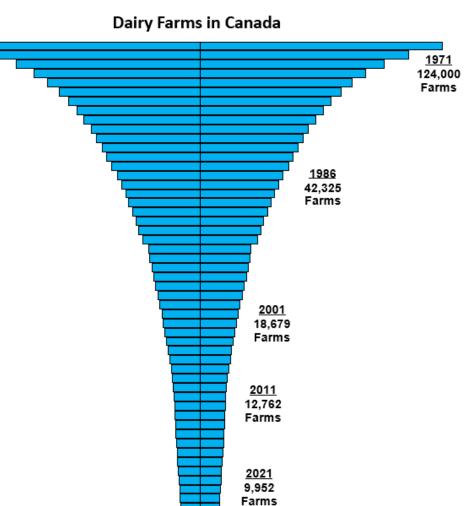
**Source:** Government of Canada https://agriculture.canada.ca/en/canadas-agriculture-sectors/animal-industry/canadian-dairy-information-centre/dairy-statistics-and-market-information/farm-statistics/farms-dairy-cows-and-dairy-heifers

# Demand for Dairy Products

Canada has a **supply management system** for dairy, poultry and eggs.

Steady trend to fewer dairy farms, but the demand and production levels continue to





## Dairy Industry Partners

- Farmer funded
- Farmer run
- Representing 10,000 dairy farmers
- Industry voice to government(s)
- Invests and coordinates national dairy research, both animal and human nutrition
- "Blue Cow" logo



# DFC's **proAction**® Initiative

Milk Quality



**Food Safety** 



**Traceability** 



profaction<sup>®</sup>



**Animal Care** 



**Biosecurity** 



**Environment** 

## Key Partners in Genetic Improvement

#### **Breed Associations:**

- Holstein Canada (94.2%)
- Jersey Canada (3.7%)
- Ayrshire Canada (1.4%)
- Brown Swiss, GuernseyMilking Shorthorn andCanadienne (0.7%)



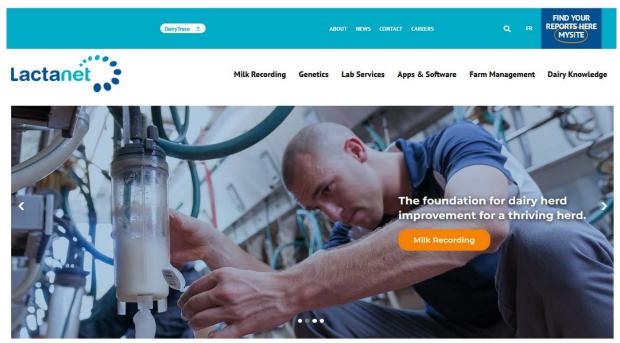
### A.I. (>5% market share):

- Semex Alliance
- Canadian farmer-owned via CIAQ, EastGen & WestGen
- Select Sires GenerVations
- Alta Genetics / Urus
- ABS Global
- STgenetics Canada

## Lactanet: Dairy Excellence

- Established in June 2019
- Partnership to integrate
   Canada's milk recording
   organizations (Valacta and
   CanWest DHI) with national
   dairy cattle genetic
   evaluation centre (CDN)
- Farmer-led Board of Directors
- Team of ≈450 employees
- Located in Montreal, Québec and Guelph, Ontario





### About Lactanet

### **Canadian Network for Dairy Excellence**



Milk Recording

Improve the profitability of your dairy farm and ensure its sustainability.



**Genetic Services** 

Discover the latest in dairy genetics and genetic evaluations for all dairy breeds in Canada.



Our labs test your samples and offer you key information to help manage your herd.



On-farm consulting to help you make the best business decisions.



#### Centre of Expertise

Explore the latest trends and developments in dairy production.



Report dairy cattle traceability events and order animal tags.

# Milk Recording Activities

**DHI** – *milk recording services* 

- Traditional milk sampling
- •eDHI remote data collection
- •Herd management software (DairyComp, Lac-T, etc.)



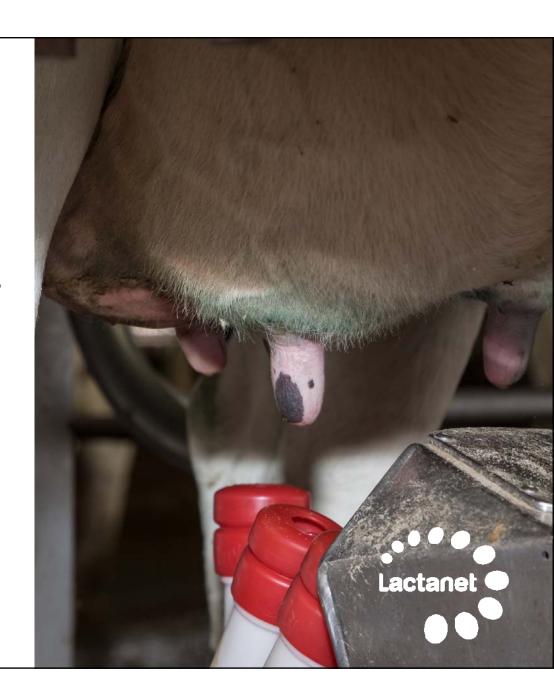
# Average Herd Size

Region	Total Herds	DHI Herds	% DHI	Average Herd Size
ВС	472	228	48.3%	185
АВ	493	302	61.3%	166
SK	156	79	50.6%	201
MB	251	140	55.8%	190
ON	3,326	2,253	67.7%	92
QC	4,668	3,078	65.9%	82
Atlantic	552	289	52.4%	106
Lactanet Canada	9,918	6,369	64.2%	98

### Robot Trends

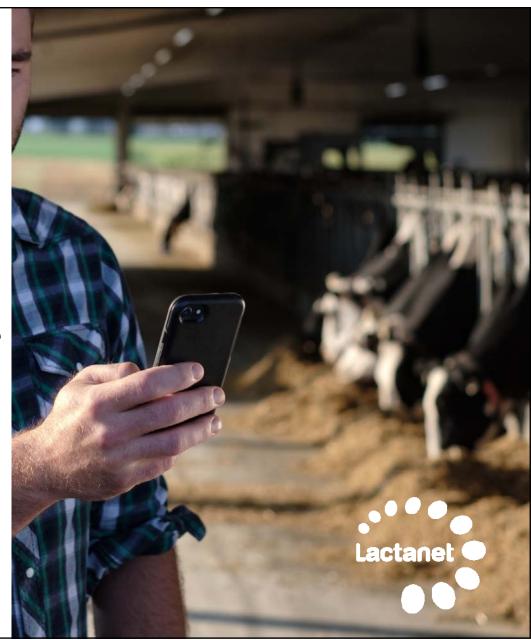
### **Robotic Milking Systems**

- ●948 DHI herds with robots → 14.9%
- •121,500 DHI cows milking with robots
- **→** 19.4%
- Conversion rate of 2 barns/week
- Robot average of 128 cows,
   approximately 2 boxes
- •Ranges by province: 4.7% in PEI to 44.3% in Manitoba



# Adapting to **Technology**

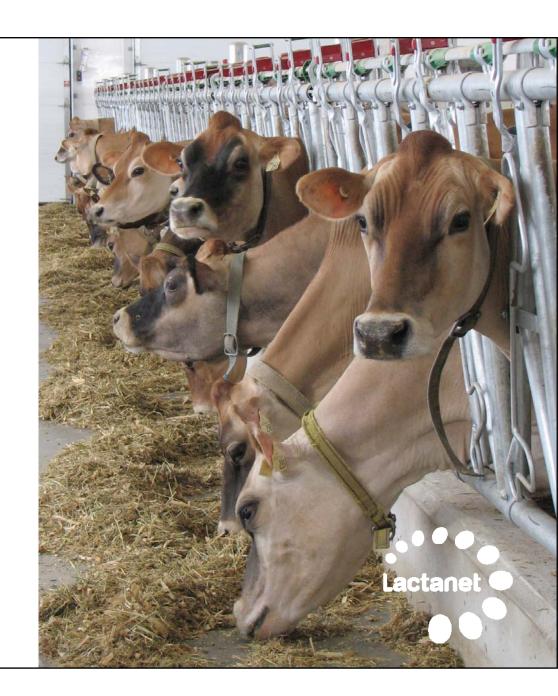
- Electronic DHI (eDHI)
   Novel service with only remote data access
- Founding Partner of iDDEN
   International collaboration to facilitate authorized data access from on-farm systems
- Collaborations with CDCB
   Genetics related data and services



### Genetic Evaluations

### For the Canadian dairy cattle industry

- Nearly 100 traits evaluated for >25M males and females
- Data exchange services for industry partners: breeds, A.I. and DHI



### Lab Services

### **DHI, Payment/Quality, Reference Lab**

- Components and Somatic Cell Count
  - BHB, Fatty acid profiles, MUN
  - MIR Spectra
- Quality: Bactoscan, Inhibitors
- Reference and calibration standards
- •ELISA: Johne's Disease, Leukosis, BVD, Pregnancy
- •PCR: Mastitis4, BVD

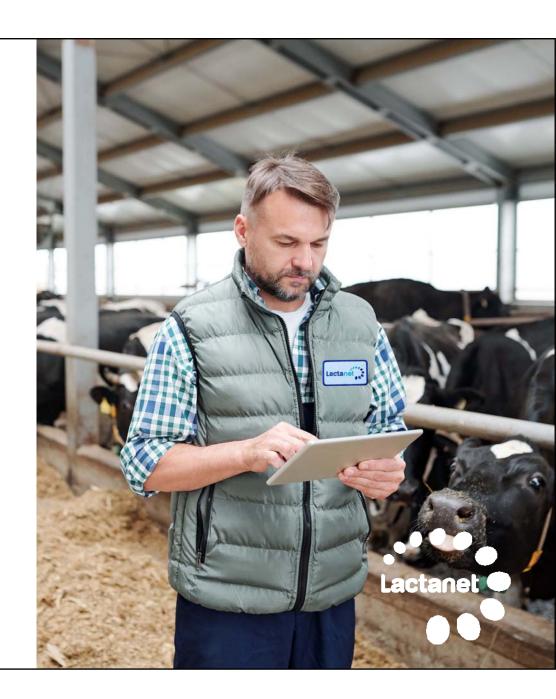


# Advisory Services

- Québec and Atlantic Provinces
- Hourly consulting services 33% of Québec customers

## Centre of Expertise

- Innovation team for herd management located in Québec
- \$1.5M/year funded by Québec
   Provincial Government (MAPAQ)



# Traceability



National dairy cattle traceability system launched in October 2020





### Canada's Vibrant AG Culture

- Agriculture is at the core of Canada
- The dairy cattle industry is strong, organized and highly collaborative
- Lactanet was created for the benefit of dairy farmers
  - Vertical integration advantage
  - → Economies of scale
  - → Talent attraction and opportunities
  - → National delivery of diversified products and services
  - → Integrated R&D innovation for herd management and genetics
  - Single vision and strategic planning

