CANADIAN HEMP TRADE ALLIANCE CANADA HEMP SITUATION AND REGULATIONS

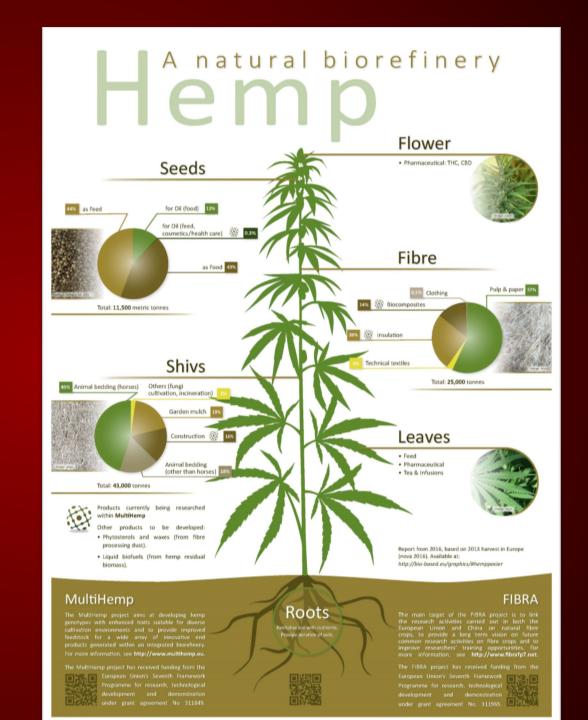
Agricultural Opportunities Forum: Canadian Hemp Perspective Madison, WI January 28, 2020



HEMP IS CANNABIS, BUT ITS NOT MARIJUANA

- Cannabis Sativa L. with less than 0.3% THC in the leaves and flowering head
- Multiple market opportunities
- Hemp seed for food
 - Dehulled Hemp Seed
 - Hemp Seed Oil
 - Protein Concentrate
- Other compelling opportunities on the horizon
 - Feed
 - Fibre
 - Fractions ... Many Active Ingredients!





WHO IS THE CANADIAN HEMP TRADE ALLIANCE?

The Canadian Hemp Trade Alliance (CHTA) is a federally-registered not-for-profit corporation. It was incorporated in 2003 and has developed a strong membership base and program of work. The business of CHTA is directed by the Board of Directors and implemented by management with the support of committees.



CHTA IS MEMBER DRIVEN

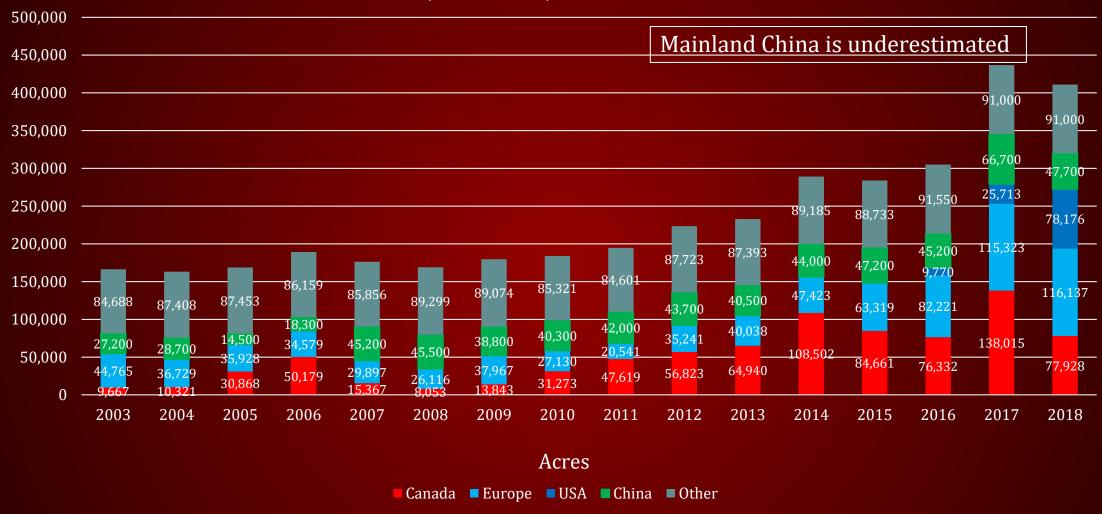
- 472 members from across the hemp value chain:
 - Farmers (238);
 - Manufacturers/Processors (105);
 - Wholesale/Retail (56);
 - Research (14);
 - Hemp Breeder/Seed Supplier (14);
 - Governments (17); and
 - Consultants (28)
- Members from 9 of 10 Canadian provinces
- Directors are elected by the members
- Officers are elected by the Board





| Province | Members | 2018 | |
|------------------|---------|--------|----------|
| | | Acres | Hectares |
| Saskatchewan | 91 | 27,119 | 10,975 |
| Alberta | 132 | 30,003 | 12,142 |
| Manitoba | 63 | 11,549 | 4,674 |
| Ontario | 63 | 3,464 | 1,402 |
| British Columbia | 59 | 531 | 215 |
| Other | 64 | 5,262 | 2,129 |
| Total | 472 | 77,928 | 31,537 |

HEMP IS GROWING WORLDWIDE... PROPELLED BY FOOD, FEED, FIBRE AND FRACTIONS

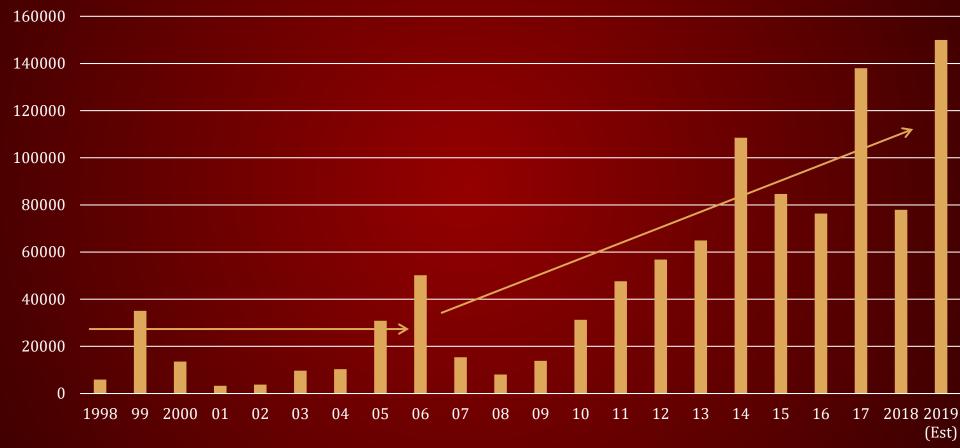




...by seizing the value of the whole hemp plant

HEMP IS EXPANDING IN CANADA... PROPELLED BY FOOD MARKET DEMAND

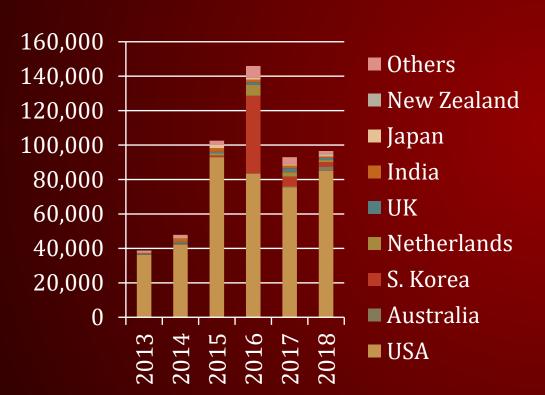
Licensed Acres



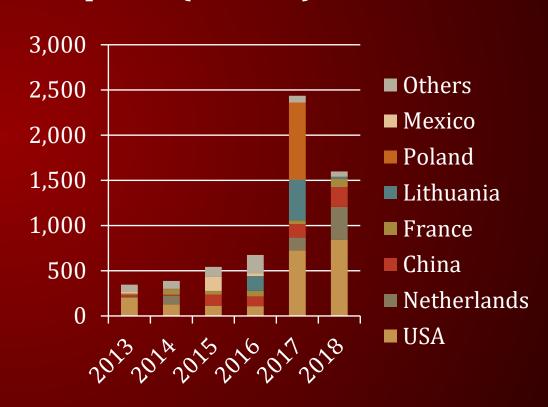


CANADIAN HEMP TRADE 2013-2018

Exports (C\$'000)



Imports (C\$'000)





FOUR PILLARS OF \$1B HEMP INDUSTRY BLUEPRINT

- Food well developed in Canada, still growing, developing standards, domestic and export food ingredient opportunities
- Feed need regulatory approvals with CFIA
- Fibre lots of interest, but need critical mass to attract decortication and value-added capital investments
- Fractions tightly restricted due to current Cannabis Act and Industrial Hemp Regulations



Cannabis and Hemp

- The Canadian hemp industry is regulated by the Government of Canada – Health Canada.
- Cannabis Act (Bill 45) of 2018 specifies all regulations covering the production, storage, transportation, sale, and processing of hemp and cannabis.
- Most hemp-related activities are exempt from Cannabis regulations, and are controlled under the Industrial Hemp Regulation.



Hemp Farming

- Farmers must obtain a Hemp Grower License in order to plant industrial hemp in Canada.
- Farmers are allowed to grow, harvest, store hemp seed, straw and roots, and chaff (flowers, leaves and stems) once they have a license.
- Farmers must report seeded area and locations to Health Canada within 30 days of planting.
- Only approved hemp cultivars registered on Health Canada's List of Approved Cultivars (LOAC) may be planted in Canada. Further, only pedigreed seed, of at least Certified status, can be used to grow hemp in Canada. This seed must be purchased from a member of the Canadian Seed Growers' Association.
- The use of herbicides and pesticides on hemp is controlled by the Industrial Hemp Regulation and the Canadian Food Inspection Agency (Minor Use).



Hemp Seed for Food

- Farmers may sell hemp seed to Canadian licensed hemp food processors.
- Farmers may also export hemp seed, once they obtain a Health Canada export permit.
- Hemp food processors, buying viable hemp seed, must obtain a Hemp Processing License.
- All processed hemp foods (dehulled seed, hemp seed oil, protein concentrate, and toasted hemp seed) can be traded in Canada and exported without a license.



Hemp Seed for Livestock Feed

- Livestock feed ingredients are regulated in Canada under the Feeds Act and Regulations administered by the CFIA.
- All feeds must be safe to livestock; to humans (by the potential transfer of residues into human food, that is, meat, milk and eggs, and via worker/bystander exposure); and to the environment.
- Hemp seed is not currently registered as a feed ingredient in Canada, which excludes a large market opportunity for Canadian hemp farmers.
- CHTA is seeking registration of hemp seed and its derivatives for all major livestock species in Canada.



Hemp Straw for Fibre

- The transportation, sale, and export of hemp stripped hemp stalks (straw) and processed hemp fibre do not need a license.
- Hemp straw is generally worked back into the soil by farmers in order to improve soil structure (moisture holding capacity) and nutrition (particularly nitrogen).
- There is a growing hemp processing industry in Canada. As the primary processing capacity (decortication) matches the supply of straw, a viable national market will emerge.
- Secondary processing of hemp fibre is also growing. Companies are focusing on non-woven (insulation and germination mats), hempcrete (spray insulation and bricks/blocks), bio-composite (panels and hemp reinforced concrete), textile (cottonized fibre), and absorbent (livestock bedding, pet litter and commercial) products.

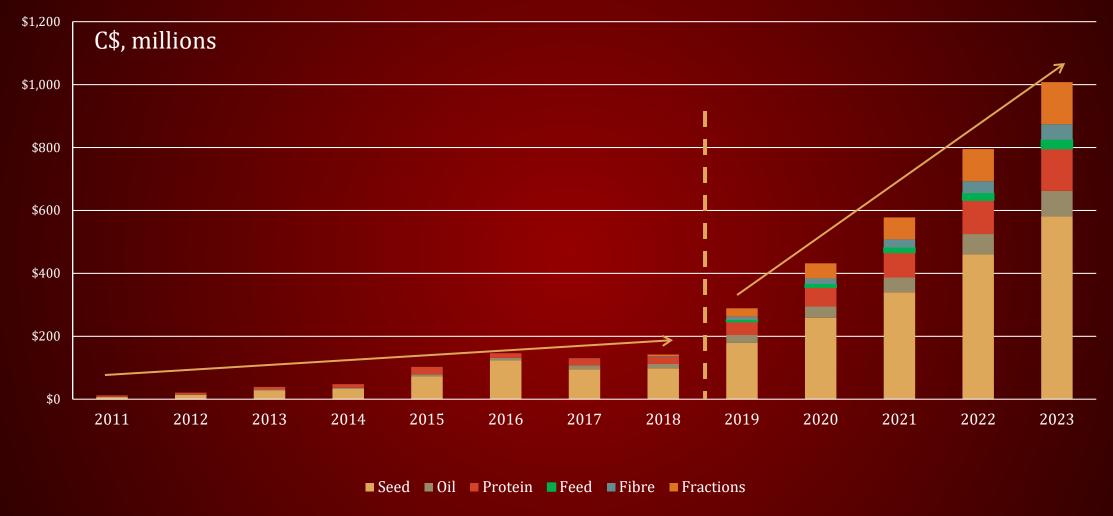


Hemp Chaff for Fractions

- Licensed Hemp Growers are allowed to harvest and sell hemp chaff (flowers, leaves and branches) to Canadian Licensed Cannabis Processors.
- Licensed Cannabis Processors are allowed to extract cannabinoids (i.e. CBD) for sale to 3 markets:
 - Canadian medical marijuana program (direct to patients issued a prescription by a medical doctor);
 - International medical marijuana programs that have been recognized by Health Canada; and,
 - Provincial government regulated retail buyers (age restricted) in Canada.
- Export of hemp chaff is not currently allowed, as Health Canada considers this
 product to be covered by the UN 1961 Single Convention on Narcotic Drugs. The
 World Health Organization's Expert Committee on Drug Dependence (Session 41)
 recommended the removal of all hemp extracts and tinctures from this convention.



GROWING A \$1B HEMP INDUSTRY BY 2023





...by seizing the value of the whole hemp plant

CHTA BUSINESS PLAN

Government Relations

 Communicate industry needs for specific regulatory reform to enhance industry competitiveness and wealth generation;

Standards

Developing domestic and international standards for hemp food, feed, fibre and fractions;

Research

Supporting the development of new hemp genetics and revision of feed and cannabinoid regulations. Supporting the expansion of hemp as a food ingredient (GRAS, PER and PDCAAS);

Market Development

Promoting hemp food and fibre products at key domestic and international trade shows;

Engagement

- Promoting the consumption of hemp food as part of a health balanced diet; and
- Developing enhanced working relationships with domestic and international industry and regulatory players to facilitate the removal of barriers to industry expansion.



5 Big Projects +

CBD:

Food and Natural Health Products

Genetics:
Field Trials &
New Registration

ASTM:

International Hemp Standards

> Bioactivity Research for Human Health

1 Massive Effort

Hemp Seed: Livestock Feed

Hemp Chaff:
Post Harvest
Preservation



THE FOUR FACES OF HEMP:

- Food
 - Dehulled Hemp Seed
 - Hemp Seed Oil
 - Hemp ProteinConcentrate
- Feed
- Fibre
- Fractions (CBD)















THANK YOU!

End

