

From Producer to the World™



Murad Al-Katib: AGT Food and Ingredients Inc.

The Changing of Agri-food – Opportunities in Innovative Agri-Processing

AGT Foods Company Highlights

AGT Company Overview

- **AGT Food and Ingredients Inc. (“AGT Foods”)** is a global leader in pulse, grains, staple food and food ingredient processing and distribution, with merchandising offices and over 45 value-added processing facilities in **Canada, the U.S., Türkiye, Australia, and South Africa; India, China and European** sales offices; **Central Asia** origination offices and a **global customer base**
- **AGT Foods Highlights:**
 - \$2.9 billion sales reported in 2022
 - Exports to 120 countries
 - Approximately 2,900 employees globally
- **2019** - Majority investment in AGT by **Fairfax Financial Holdings** and **OMERS**.
- **AGT Founders/Management** retains a large ownership share

Global Company



Fairfax Company & Brands



Global Facilities & Offices

- Canada head office and over 45 facilities in 6 key agricultural production origins on 5 continents with sales, merchandising, origination and administration offices located around the globe
- Provides significant cost savings, superior market intelligence and stability of supply through diversified origination



AGT Foods Canada Regina Main
Regina, SK, Canada



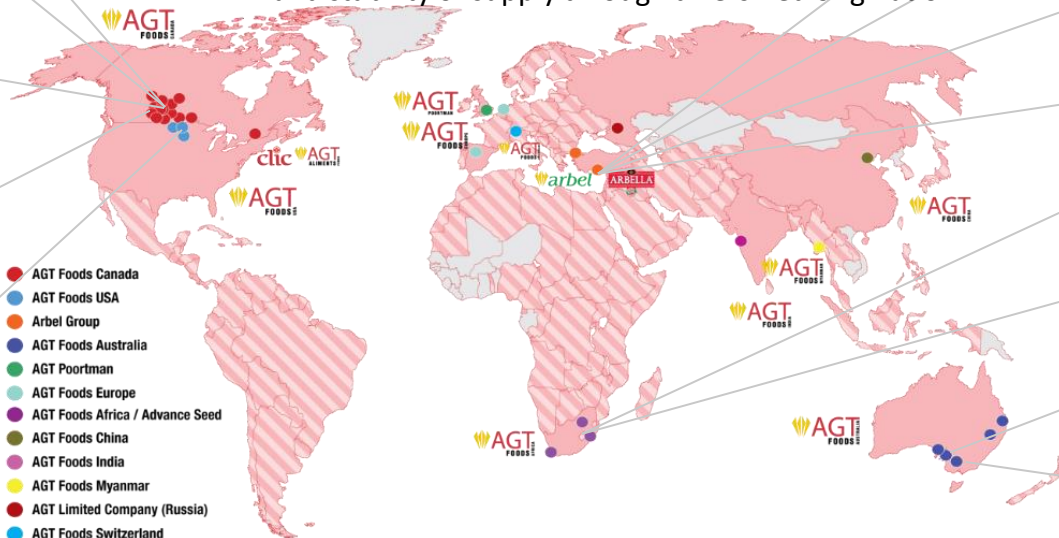
AGT Delisle
Delisle, SK, Canada



Big Sky Rail / Last Mountain
Railway, Saskatchewan, Canada



AGT Foods USA Minot
Minot, ND, USA



Arbel Group
Mersin, Turkey



Arbella Pasta
Mersin, Turkey



AGT Foods South Africa /
Advance Seed, Johannesburg,
Gauteng, South Africa



AGT Foods Australia,
Horsham, Victoria, Australia

Global Commodity, Retail Food and Food Ingredient Business



Bulk Handling, Rail and Terminal Facilities



Last Mountain Railway and Big Sky Rail



AGT Foods Canada
Eston, SK



AGT Foods Canada
Beechy, SK



AGT Foods Canada
Laporte, SK



AGT Foods Canada
Lucky Lake, SK



AGT Foods Delisle - Delisle, SK



Intermobil Container Yard - Regina, SK



AGT Foods Canada
Dinsmore, SK



AGT Foods Canada
Bethune, SK



AGT Foods Canada
Condie (N. Regina), SK

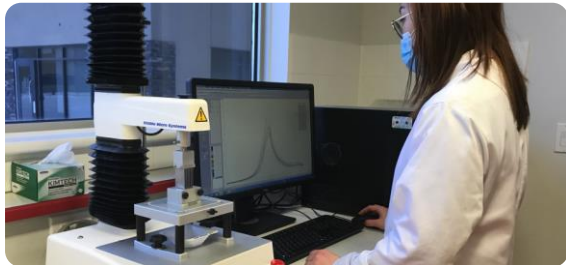


AGT Foods Canada
Aylesbury, SK



MobilEx Terminal – Thunder Bay, ON

AGT Foods: *From Producer to the World . . .*



We are the **leaders in innovation** in the **pulses sector**



We create **R&D-led, customized solutions** for your food products



We offer **finished food products** ready for the marketplace



We are **scalable and vertically integrated** to match demand



We hold internationally-recognized certifications, including **FSSC 2000**



We deliver **high quality, good taste and clean ingredients**

Food Production Targets

We need to produce
 in the next **40 years**
 the equivalent of
ALL of the food
 produced in the **last**
10,000
years



Agri-Foods Market Dynamics

Traditional Markets for Agri-Food

Growth Driver: Population & Global Demand for Food

Markets: S. and E. Asia Pacific, MENA, Central/South America, Africa

- 2050 - Global population expected to rise 30% to over 9 Billion
- Global food output will have to grow by 70% to feed the world with growing middle class
- Pulses, grains are a sustainable source of vegetable protein, a key nutrient for large numbers of the world's populations

New Markets for Pulses driven by:

Growth Driver: Health, Nutrition and Sustainability

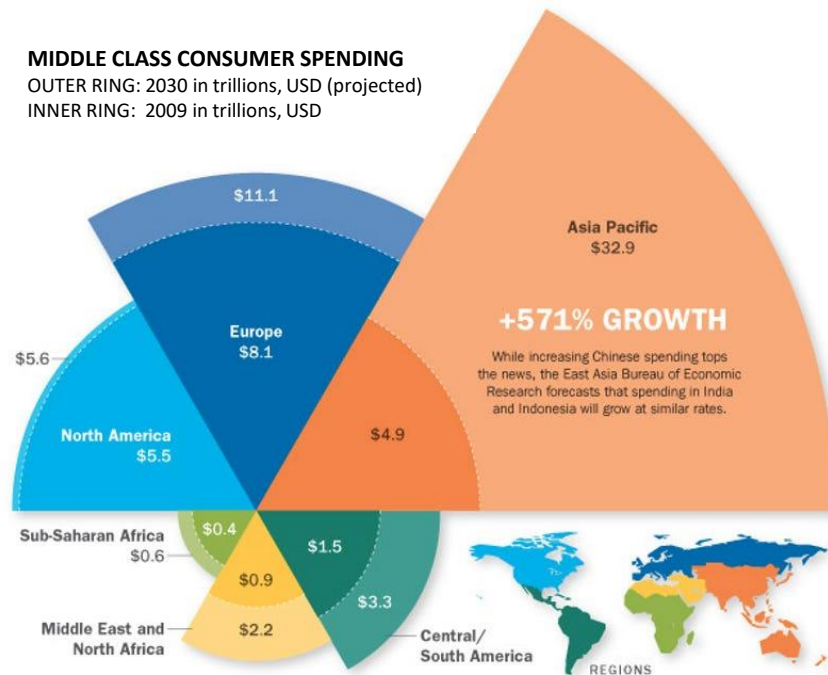
Markets: Europe, North America, China

- Health, nutrition, changes in diet choices
- High Protein and Fibre, Nutrient Dense, Low Fat, Gluten Free, non-GMO, Low Allergenicity
- Lower Energy Use, Reduce Greenhouse Gas Emissions, Improve Soil Health through Rotational Cropping, Increase Water Use Efficiency

MIDDLE CLASS CONSUMER SPENDING

OUTER RING: 2030 in trillions, USD (projected)

INNER RING: 2009 in trillions, USD



Rapid Expansion of the Global Middle Class

At a global level, we are witnessing the most rapid expansion of the middle class the world has ever seen



At the end of 2016, there were about 3.2 billion people in the global middle class. On average 160 million will join the middle class annually for the next 5 years.

160 million

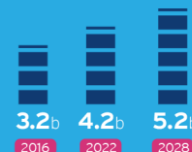
Each year for the next 5 years will be added to the global middle class.

In only three years, the fast-expanding global middle class will reach a historic milestone

Around 2020, the middle class will become a majority of the global population for the first time ever.

We are on pace to add another billion in seven years and another billion by 2028.

UPPER CLASS
MIDDLE CLASS
LOWER CLASS



Global Middle Class

88 percent of the next billion entrants into the middle class will be in Asia

By 2030, Asia could represent 2/3 of the global middle class population.



BROOKINGS



BROOKINGS

The middle class will spend \$29 trillion more per year by 2030

Globally, the middle class is already spending \$35 trillion, and could spend \$29 trillion more by 2030, accounting for roughly 1/3 of the global economy. The market for middle class consumption could grow faster than global GDP growth.

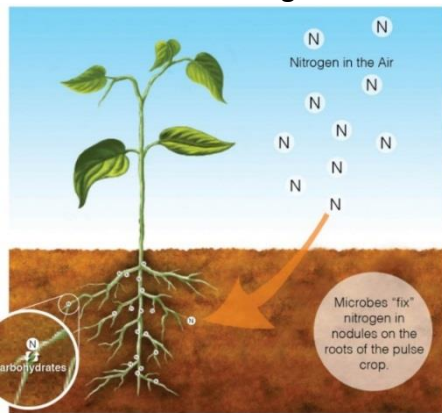


*per year in real terms

Sustainable Agriculture in Canada

Plant Fixing Nitrogen

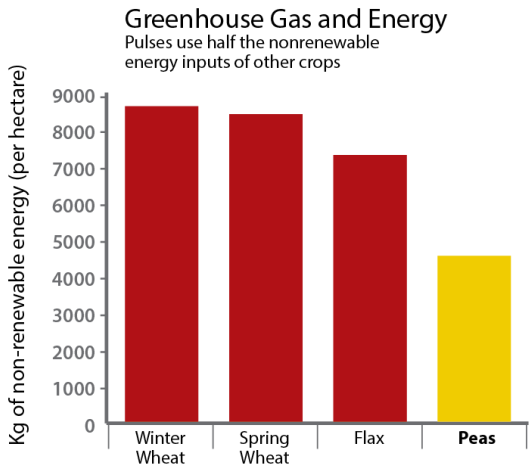
- 3 crop rotation – cereal, oilseed and pulses
- Pulses produce their own fertilizer by utilizing nitrogen fixing soil bacteria that live inside their root systems.
- Pulses improve fertility of soil for other cereals and oilseeds grown in rotation.



Pulse crop with root nodules

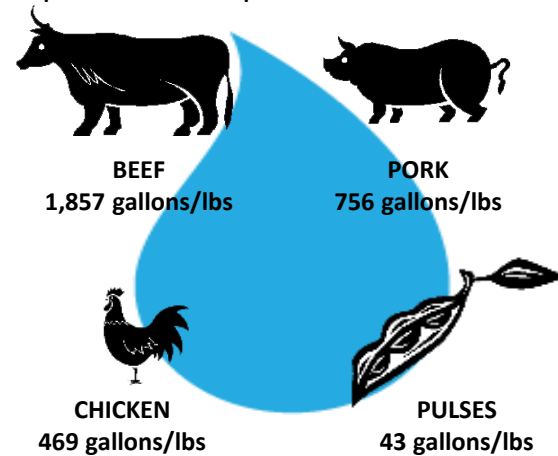
Lower Energy Requirement

- Pulses use less non-renewable energy relative to other crops.
- 70% of the non-renewable energy used in cropping systems in western Canada is attributable to fertilizers.



Increased Water Use Efficiency

- **43 gallons** of water required to produce one pound of pulses.
- **1,857 gallons** of water required to produce one pound of beef.



Canada – The Global Agri-Food Partner

- **Abundant natural resources**
(e.g. freshwater, long coastlines suited to aquaculture, least densely occupied arable land in the world)
- **Strong network** of R&D facilities universities
- **Sophisticated, ethnically diverse consumer base** that stimulates product development
- **Early adopters** of technology
- **Reliable access to capital and inputs** (e.g., fertilizers, feed, seeds)
- **Lowest use** of pesticides per-hectare
- **Political stability and goodwill** that encourage foreign investment
- **Strong primary and secondary processing** sector



Canada – First Stop on Protein Highway

- In emerging economies, demand for protein is growing rapidly due to urbanization and rising incomes.
- Canadian ingredients and food have a reputation of safety, quality and trustworthiness.
- Canada's food brand is enhanced by the country's natural advantage, - producing food that is among the best in the world
- Pulses, Cereals, Meat & Poultry, Dairy, Eggs
- Canada's ag-food sector could become the trusted global leader in safe, nutritious and sustainable food for the 21st century.



Plant-Based Foods, Fuels and Biomass

Canada Leads the World in Ag Production

DRIED BEANS

DRIED PEAS

LENTILS

CHICKPEAS

A GREAT ADDITION TO ANY DIET

Full of MINERALS like

GOOD FOR FARMERS TOO

PULSES have nitrogen-fixing properties that increase soil health

Grown for both human consumption & animal feed markets

average farm gate value of

\$2.6B

average export value of

\$3.2B

WE'RE #1

CANADA is the **WORLD'S LARGEST PRODUCER & EXPORTER** of **LENTILS** and **PEAS**

Our WHEAT IS IN A FIELD of its own

CANADA produces an average of **30M TONNES** of WHEAT each year.

CANADA is the **WORLD'S LARGEST PRODUCER** of high-protein MILLING WHEAT.

WHEAT is primarily grown in: Alberta, Saskatchewan, Manitoba, Ontario.

SASKATCHEWAN is the **LARGEST PRODUCER** of WHEAT.

CANADA is one of the **WORLD'S TOP FIVE WHEAT EXPORTERS**, with an average of **\$7B** EXPORTED annually.

Top Importer: UNITED STATES

We've been breeding wheat varieties for over **100 YEARS!**

MARQUIS WHEAT - a high-quality grain that kick-started Canada's prominence as a grain grower

Gluten-rich varieties of DURUM WHEAT - prized by pasta manufacturers around the world

Canada Western RED SPRING WHEAT - a premium wheat for bread production

WHEAT A VERSATILE GRAIN!

Wheat is a major ingredient in **BREAD, BISCUITS & BREAKFAST CEREALS**

It's even used to create products like:

OUR CANOLA OIL REALLY STANDS THE HEAT

Canadian plant scientists developed canola in the **1960s**.

On average, Canadian producers harvest **8M hectares** of canola land each year.

Canadian-grown canola contributes over **\$26B** to the Canadian economy each year.

Canada exports approximately **90%** of its canola as seed, oil, or meal to over 50 markets around the world.

Canola Oil Nutrition Facts	
Saturated Fats	LOW
Trans Fats	0%
Cholesterol	0%
Vitamin E	Good Source

Canola oil has a high smoke point, making it ideal for frying and sautéing.

CANOLA SEEDS ARE CRUSHED TO CREATE:

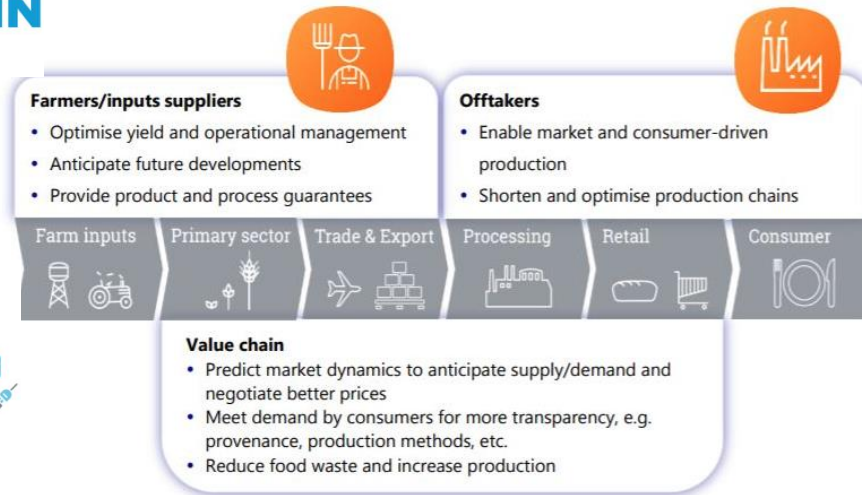
56% MEAL for high protein livestock feed

44% OIL for

Technology and Innovation

How will technology affect the face of ag exports over the next 20 years as Canada positions itself to be the key global supplier to the growing middle class in the world?

B BLOCKCHAIN



Why ESG Matters to AGT

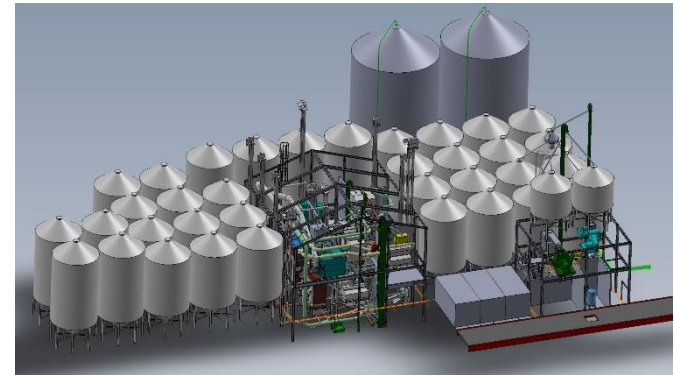
- **AGT believes ESG will have a defining impact over the long-term for all businesses and institutions.**
 - **As one of the world’s global leaders in plant-based foods, we believe we are part of the solution to creating a healthier, more sustainable world**
-
- ✿ **AGT is a world leader in closing the protein deficit in global diets in sustainable ways.**
 - ✿ **AGT’s customers look to us to provide high , healthy, plant-based ingredients and sustainable, planet friendly packaged foods**
 - ✿ **AGT believe plants and biomass can provide the base material for sustainable, food, fuel and feed and has active projects and programs underway to actualize this.**



AGT Investment in Oat Processing

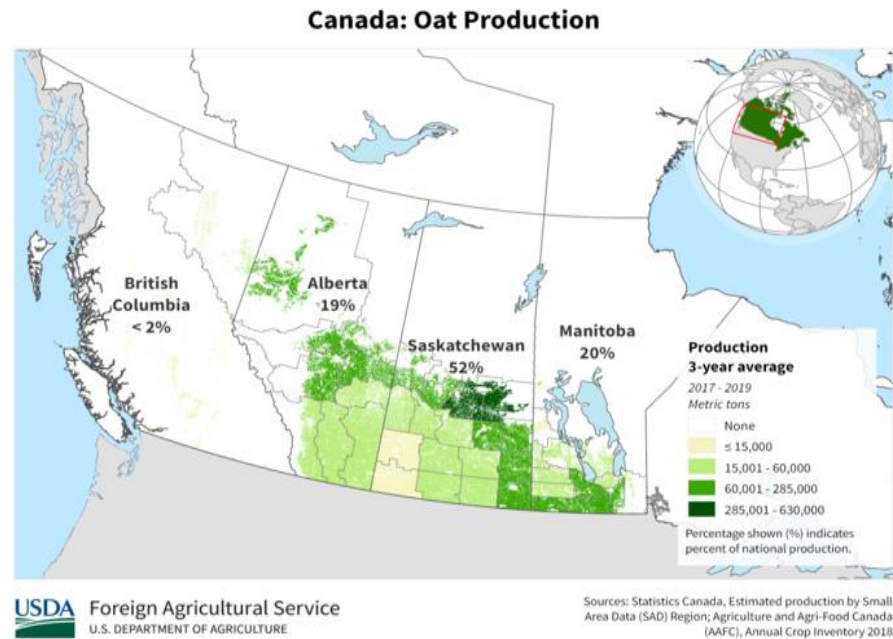
AGT Aberdeen facility converted to process oats – in the middle of key oat growing region in SK

- **Oat Groats Processing: Gluten free & sustainable story like pulses.**
 - Oat Groats (for rolled, flakes, flour, feed, horses)
 - Rolled / Flakes for oatmeal, granola bars & quick cooking applications
 - Flour for baking, oat milk etc.
- **Oat Hulls:** Animal feed, baking applications & cellulose base in AGT’s Micronutrient Biomass Soileos fertilizer project shows that pulses and oat fibre are natural biomass to deliver micronutrients to crops, fruits and veggie production.
- **Other Uses:** Oat groats to AGT’s Minot for fine milling & blends **(pulses + grains = complete protein)**
- How will these products be used?
 - Plant Based beverages the second largest dairy alternative following almond milk.
 - Plant-based milk accounts for 15% of all dollar sales for retail milk, according to market research from the Good Food Institute.
 - Big opportunity in extrusion



Canadian Oat Production – Prairies Key Region

- **Canada is the second largest oat producer in the world**
- **Canada production 2.64 mmt in 2023**
 - **Saskatchewan 1,034,149 mt**
 - Manitoba 653,251 mt
 - Alberta 642,115 mt
 - Rest of Canada 306,060 mt
- Global production approx. 25 mmt
- Main markets for Canadian oats and oat products include the US (accounting for 76% of the exports), Chile (10%), and Mexico (10%), with the majority of the remainder going to Peru, Japan, and South Korea.



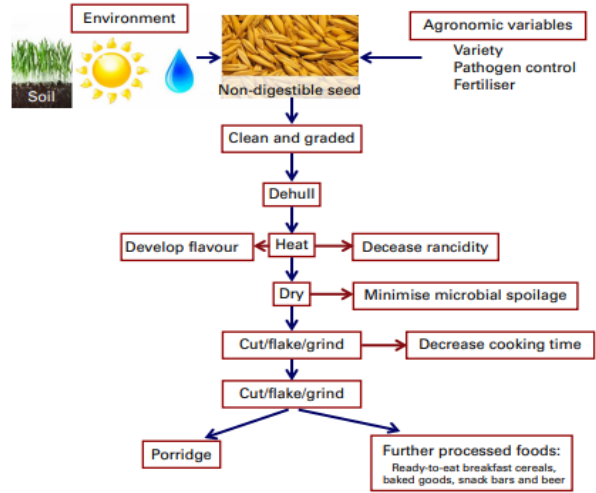
Haulin' Oats - Oat Production and Process Flow

Oat Groats



- Just oat with hull removed.
- High in protein and soluble fibre, iron, zinc, B vitamins.
 - Very digestible for pets and people,
 - very palatable and good source of energy
 - Healthiest way to eat oats
- Healthy carbs, high in beta glucan – good for immune systems, best used in porridges and stews. Cereal germ, bran, endosperm
- Naturally gluten free (volunteer wheat is problem, barley is worse as harder to clean out)

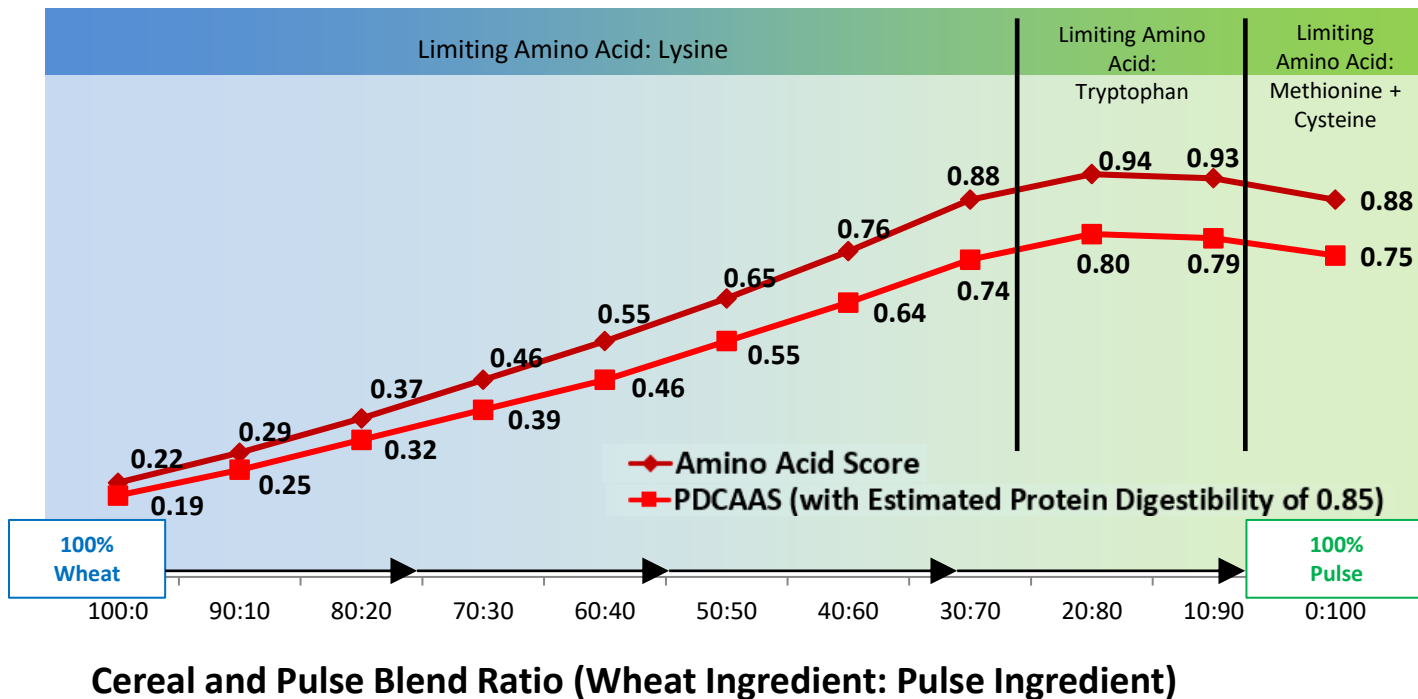
Processing of Oats



- First stage processing oats to groats by impact dehulling.
- Oats contain a higher fat content, kilning (heat & steam) then drying is required to stabilize the enzymes for shelf life within 72 hours of the hull being removed.
- With the hull removed the bulk density goes up 75% for freight savings.

Cereals & Pulses (Power of Blending)

PDCAAS of Wheat and Pulse Proteins Blends (with Estimated Protein Digestibility of 0.85)



Blending (pulses + grains = complete protein)

Oat/Pulse Blends for Extruded Pasta

- Based on and feeding into AGT’s proprietary pasta extrusion technology and production infrastructure
- Gluten-free trend in pasta is strong
- Unique ingredient decks resulting in:
 - Nutritional advantage
 - Superior taste and texture
- Opportunity for high protein products



Extruded Snacks and Cereals

- This encompasses breakfast cereal, snacks foods like flatbreads, crisps and puffs as well as ingredients for in bar application.
- Produced though blending the ingredients, preparing a dough with water in the extruder barrel under pressure, shaping the product at the exit die and drying.
- Based predominantly on a starch matrix, however protein matrixes are a possibility.
- Feed into AGT’s existing extrusion infrastructure
- Unique ingredient decks possible through blending oats and pulses resulting in:
 - Nutritional advantage
 - Superior taste and texture



Irrigation Options Are Increasing In Importance

Lake Diefenbaker Irrigation Project

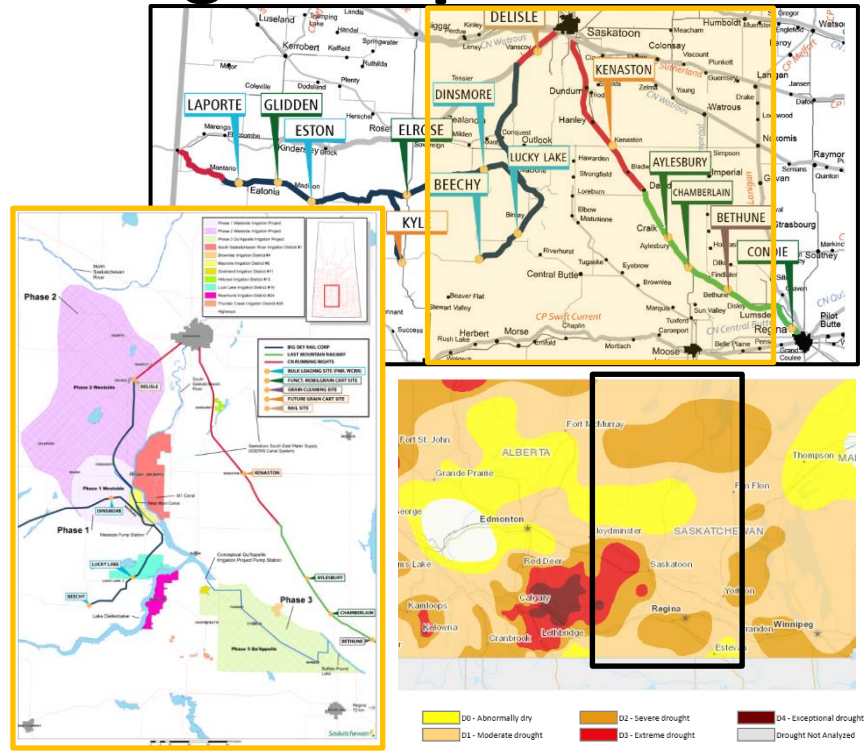
- AGT owns and operates short line rail assets (**Mobil Grain**) that would service new irrigation areas
- **Phase 1 (near Dinsmore)** and **Phase 2 (Delisle towards Rosetown)** would be serviced by **Big Sky Rail Corp**
- **Phase 3 (along the Qu'Appelle River to Buffalo Pound)** would be serviced by **Last Mountain Railway**

Sustainable Irrigation can:

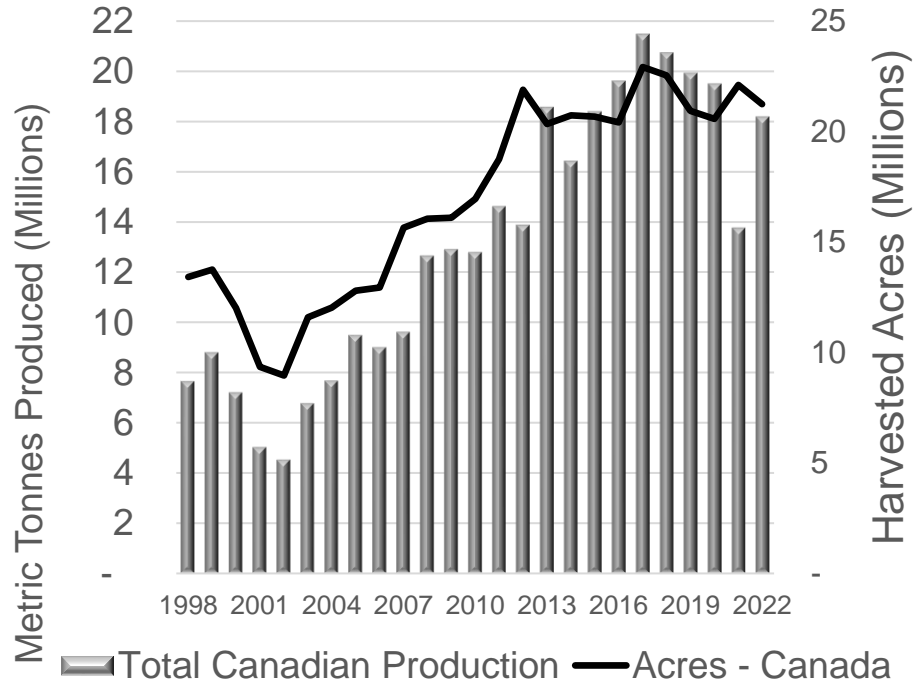
- Tackle increased emissions with low-carbon power
- Increased yields of low carbon intensity crops which makes our products more competitive in EU and emissions-sensitive markets
- Tackle fertilizer use with biomass such as Soileos produced by AGT in a JV

Irrigation needs to be more intertwined into the broader agriculture vision for Saskatchewan

- Irrigation policy needs to go hand-in-hand with new value-added processing capacity
- Increased yields of traditional crops (i.e. canola) can be accompanied by new value-added processing facilities nearby
- Irrigation can enable production of new crops or new varieties for novel value-added products



Canola Production Growing In Rotation



- SK farmers – 3 crop rotation with cereal, canola and pulses
- Growth in canola production is led by expanded crush due to bio-fuels demand
- Announced 60% Capacity Expansion to Canada’s domestic canola crush (= ~ 100% of 2022 production).
- Primarily due to increased demand for canola oil for renewable diesel production.
- Supports higher prices for Canola in Canada vs. other countries like Australia

AGT Soileos Biomass Fertilizer

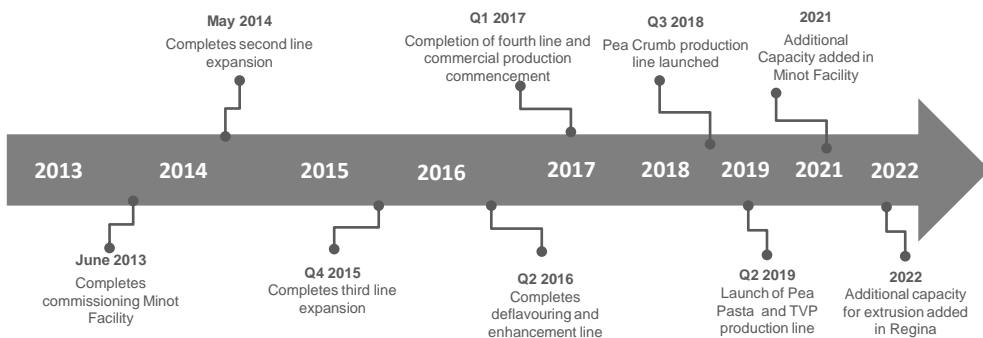
- **Soileos** is a micronutrient fertilizer that contains Zinc/Iron/Manganese Sulfur, and Potassium, which are essential for plant growth and development.
- **Soileos** designed for use on a wide range of crops, including pulses, soy, wheat, corn and others
- **Soileos** is delivered via a patented cellulose fibre system, which ensures consistent bioavailability of micronutrients and maximizes crop performance and soil health.
- Competitive advantage of **Soileos** in the market, as it differs from conventional micronutrient products like sulphate salts or chelates.
 - A simple addition to a farmer's nutrient management plan. **Soileos** is available at a retailer Soileos blends well with standard dry fertilizer products without separation, settling or breaking down



Example of AGT Investment: Pulse Ingredients

Minot ND Production Facility

- Production of Pulse Ingredient flours, starches, proteins and fibres. Commissioned for production in June 2013 with four lines currently operational and enhancement processes
- Expansions bring value-added production and modification processes including deflavoring, pre-cooking lines, and sterilization lines
 - Veggicrumb line launched fall of 2018
 - Veggipasta line and TPP line commissioned Fall 2019 and Regina 2022



Plant-based Foods and Food Trends



Consumer Trends

- Protein has a positive image with consumers
- Vegetarian diets growing with vegetable proteins replacing proteins derived from other sources.
- Rise in allergy to certain foods and ingredients
- Consumers demanding more proteins for a variety of reasons: diet, sports
- Nutrition, muscle, satiety, weight loss, etc.

Food Company Trends

- Non-GMO, Gluten-Free, Vegetarian and Sustainably sourced ingredients continue to gain traction.
- High proteins claims are now common on food products.
- Ingredients derived from plant-based/vegetables grew by 103% from 2010-2014
- Protein derived from plant-based/vegetables grew by 61% from 2010-2014 and continues to grow.

Where Plant-based Ingredients Are Being Used?

Snack Foods	Meat Analogues	Batters and Breadings	Pasta	
				
<th>Dairy Replacements</th> <th>Pet Food</th> <td></td>		Dairy Replacements	Pet Food	
				

The Veggi Line

- **From Producer to Plate.** AGT controls its entire supply chain, from the producer to manufacturing to finished food products
- **Innovation and Customization.** AGT is able to **innovate** products to meet customer demands with capacity to produce **branded** and **private label** products
- All **Veggi** products are made 100% from one ingredient... **peas!**
- **Non-GMO, vegan and gluten-free**



Our focus is clean label products that taste great!

AGT Foods – A Key Supply Partner

- **AGT Foods** has strength in worldwide grain sourcing, ingredient processing, distribution and logistics and a diversified business including:
 - Grain Origination, Merchandising and Trading
 - Bulk Grain Handling and Logistics
 - Pulse and Food Ingredient Production and Distribution
 - Retail Packaged Foods
- Global plant-based foods innovation race with the goal to feed a growing population
- Fundamental demand growth through population and income growth
- Innovation/scaling food processing critical
- Transportation infrastructure is a key consideration
- North America is the first stop on the Protein Innovation Highway
- Value creation in companies who play in multiple links in the global value chain :



