
Economic Development Officer

Value Added Agricultural Opportunities



**NORTHERN SUNRISE
COUNTY**



Value Added Agricultural Opportunities



Northern Sunrise County sits in the middle of the most northern agricultural region in the world - affectionally referred to as the Peace Country. Over the decades, generations of collective farming knowledge have resulted in the Peace Country becoming internationally renowned for its superior agricultural products.



Table of Contents

1. Canola	4
2. Oats	8
3. Wheat	12
4. Peas.....	15
5. Barley	19
6. Fescue/Forage Seed	21
7. Dairy	23
8. Honey.....	24
9. Livestock	26
10. Fruit and vegetable market gardens	29
11. Hemp	31
12. Agri-Tourism	33
13. What other municipalities and provinces are doing	35
14. Grants and Programs	37
15. Diversification Strategy	40
16. Conclusion.....	41
17. Summary of Resources	42



Canola



What are the Health Benefits of Canola Oil?

- Canola oil possesses unique health benefits surpassing many other vegetable oils and fats. In fact, it is emerging as one of the healthiest oils in tandem with olive oil. Like olive oil, canola oil has very low saturated fats. A diet low in saturated fat and cholesterol may reduce the risk of heart and stroke disease.
- Canola oil is high in calories. However, its high-caloric content comes from better fats. It is especially rich in mono-unsaturated fatty acids (MUFA). MUFA helps in lowering LDL or "bad cholesterol" and increases HDL or "good cholesterol" in the blood.
- Canola oil contains valuable amounts of the antioxidant vitamin E. Vitamin E is a powerful lipid soluble antioxidant, required for maintaining the integrity of the cell membrane, mucus membranes and skin by protecting them from harmful oxygen-free radicals.
- Canola oil has the highest smoke point of any oil, which makes it an ideal choice for deep frying because it can be heated to a higher temperature (smoke point -450 °F). This results in less oil retention in the fried foods.



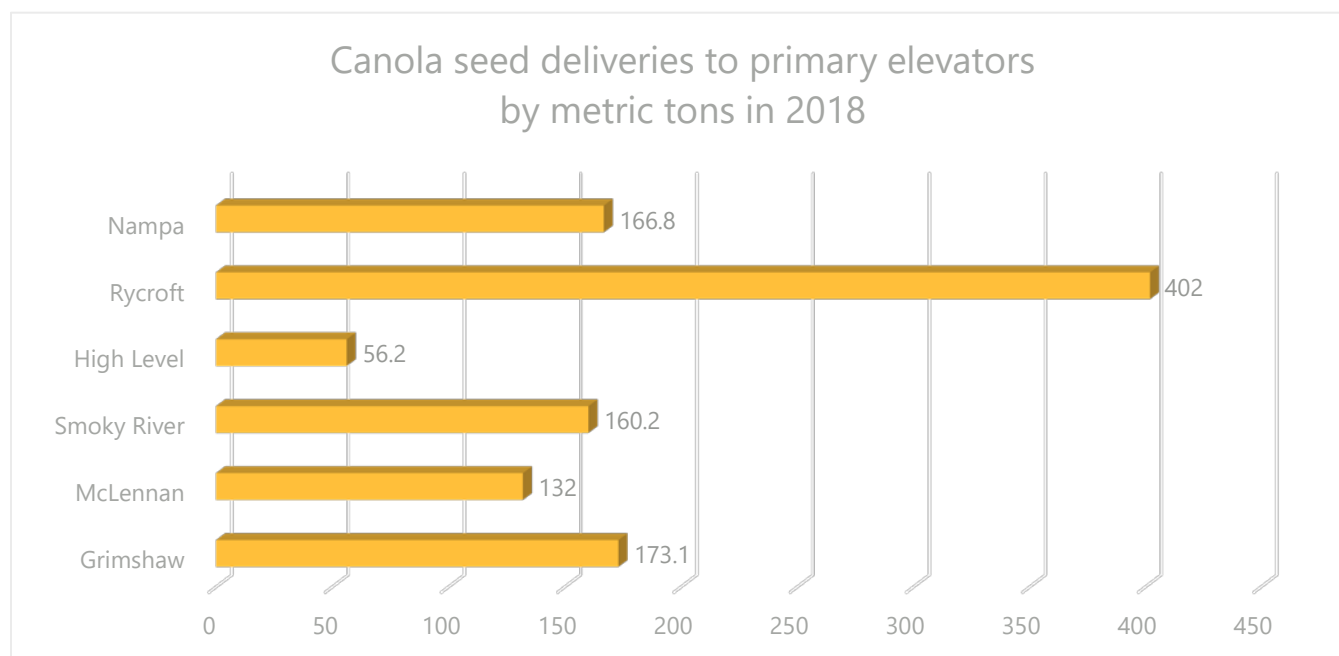
Relationship Between Canola and our Honey Producers

The link between the canola and honey industries is strong and growing. Simply put, canola is good for bees, and bees are good for canola. Together, they are superior for the health of our ecosystem and our economy.

- Canola flowers produce high amounts of nectar which contain a rich sugar profile for honey production. The large amounts of pollen offer a good nutritional balance of amino acids, protein and fats.
- Plentiful canola blooms allow bees to feed efficiently, without covering large distances. Canola fields bloom for relatively long periods, so one field can provide bees with adequate source of nectar for up to a month.
- Canola honey is preferred by consumers. The light colour and mild flavor make canola honey a top choice in the marketplace.

Transporting Canola

Canola produced in the Northwest is transported out of the region by rail. The table below shows that 94% of the volume produced in the Northwest in the year 2018 was delivered to grain terminals in the Northwest region.



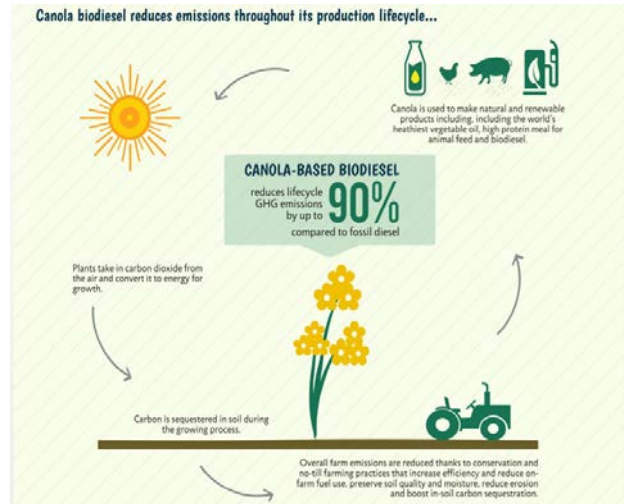
Source from PREDA Northwest Agricultural Report



Canada exports more than 90% of its canola as seed, oil or meal to 50 markets around the world, bringing billions of dollars into Canada. The biggest buyer of canola oil and meal is the United States, accounting for about 52% of oil exports and 69% of meal exports in 2018. For raw seed, the most important destinations are China, Japan and Mexico. In 2018, China's ban on Canadian canola placed a strain on producers. Efforts are underway to find an alternative buyer. At this time of this report, canola shipments to China remain blocked which puts record amounts of canola available for sale.

Opportunities for Value Added Agricultural for Canola

1. Canada's canola processing industry transforms harvested seeds into oil and meal, which are then manufactured into a wide variety of products. Canada's 14 crushing and refining plants, with 3 in Alberta, have the capacity to crush about 10 million tons of canola seed and produce about 3 million tons of canola oil and 4 million tons of canola meal annually. The main canola products are oil for human consumption and meal for livestock feed. Canola oil is refined to improve its colour, flavor and shelf life, and is further processed into a wide range of consumer and commercial food products.
2. Another promising use for canola oil is biodiesel. Other emerging industrial uses include plastics, protein isolates, adhesives and sealants. Canola biodiesel and renewable diesel are made from canola oil, a natural and renewable resource. It is a cleaner-burning alternative for diesel fuel that can be blended with diesel fuel for use in on-road vehicles, from municipal fleets to long-haul trucks, as well as off-road equipment used in forestry, construction and agriculture.



Canola Council of Canada

Palm oil currently dominates the vegetable oil market, but we are now seeing environmental issues and labour issues that are going to cap or limit its growth. This in turn will create a higher demand for canola oil, with new markets opening in eastern countries.

Issues Canola Farmers are Facing

1. China closing their market to canola exports.
2. Clubroot and Blackleg - Local farmers are looking at other alternative crops to rotate.
3. Availability of grain carts at local grain elevators.
4. Possibility of loosing Round-up Ready Canola.
5. Cost of growing Canola due to high priced fertilizers.

Canola is very well suited for this region and is a crop that Alberta farmers could produce to meet market demands. Additional local processing facilities would increase the financial incentive for County farmers to increase canola production. Additional local canola processing facilities would compensate for the loss of canola seed markets in China.



Oats



What are the Health Benefits of Oats?

- Oats are a high protein and high-fiber food that is commonly used for both human and animal consumption.
- 11% of the carbohydrate content of oats is fiber.
- Oats remain high in vitamins and minerals. Manganese helps with development, growth and metabolism. Phosphorus is beneficial for bone health and tissue maintenance, copper helps with heart health and Vitamin B1 assists with metabolism.
- With a dry protein content of 11%, oats have a higher than average protein content for a grain.



Relationship Between Oats and Livestock Producers

There is a strong link between oats producers and livestock producers. Producers are looking for low levels of foreign material and heavy test weights which are indicative of high-quality feed oats. Feed oats exports from Alberta represent almost 29 million dollars in revenue. The United States make up 93% of Alberta’s exported feed oat market. Additionally, oat sales provide a local ready cash market for neighbor-to-neighbor sales and direct to feed mill sales.

- Oat hulls are primarily used for fiber feed and biomass. This is what will most commonly be used for feed oats.
- Oat groat is the inside kernel of the cereal grain and can be processed in several different ways. This is commonly used for human consumption and high-end animal feed such as “Pony Oats”.

Oats Exports

Oats produced in Alberta are primarily transported out of the region by road. In 2018, the largest importer of Albertan oats was the United States, followed by Mexico and other international partners. Of the total oats exported in 2018, \$30,022,133 worth of the oats were exported to the US, which is approximately 83% of exported product. Thanks to the marketing efforts of the Prairie Oat Growers Association this market share is set to grow, representing an area that oat produces in the Northwest are perfectly poised to capitalize on.

2018 (CDN \$)

Top 10 Alberta Oat Importers

United States	30,022,133
Mexico	2,754,133
Korea, South	923,191
Japan	766,527
South Africa	512,150
Ecuador	290,897
China	241,296
United Arab Emirates	234,115
Peru	128,855
Germany	11,382
Others	31,280
Total	35,915,939

Sourced from PREDA Northwest Agricultural Report



Varieties of Oats

Oats can be refined in a variety of ways. This represents an opportunity for producers to have flexibility with the product shipped to market.

- **Milling oats:** Designed for human consumption, they are high quality and will be processed further into a rolled or steel cut format. These oats should have a groat content and be free from weather damage. This is commonly used in baked goods or as a cereal.
- **Feed oats:** Having heavy test weights and lower levels of foreign material are two factors that impact feed oats. These may be exported out of the province or sold in the local market.
- **Performance Oats:** Also known as pony oats, these are high performance animal feed that are used commonly by horse owners and are sold in local and international markets.

Opportunities for Value Added Agricultural for Oats

1. **Oat based beverages** - Thanks to the high nutritional value of oats they are an increasingly popular product among health-conscious people around the world. Several oat-based products that are in production include oat milk, powdered oat drinks and oat-based spirits (Whiskey or Vodka). Oat milk and powdered drinks appeal to the health-conscious community, while oat-based spirits appeal to consumers looking for a varietal spirit.
2. **Non-cereal food products** - Oats have application as food products beyond their use as a cereal. Several identified uses include oat yogurt as a fat substitute. Processed from whole oats and oat dextrin these represent a small, and yet largely untapped, segment of the oats market. These are animal free products that will appeal to the vegan and vegetarian markets.
3. **Gluten-free products** - As more and more people move away from products containing gluten as a medical or personal choice, the market for gluten-free products becomes larger. This represents an opportunity to produce oat flour within the County. This product can then be further processed to produce gluten-free products ready for market. Steel cut oats is a top seller in the breakfast oat market.



Peace Region Oat Processing

Currently in the Peace Region there are three oat processing plants in operation. The first is an animal feed plant located near Falher, AB. The second is a plant located just east of Rycroft, AB that processes oats into oat groat, steel cut and rolled oats, oat bran, oat flour and oat fiber. Finally, the South Peace Grain Cleaning Co-op located in Dawson Creek, BC processes oats into feed grain mixtures with a variety of feed applications.

Due to the distance between the Rycroft facility and Northern Sunrise County, a facility that produces rolled and steel-cuts oats would be ideal in our County. Due to the lack of other facilities in the area surrounding the County, a facility in the County would provide the Peace region producers another access to market.

Also provided with this report is a business plan from Lac Cardinal Regional Economic Development Board and Mackenzie Oat Milling Ltd. for an oat processing plant.



Wheat



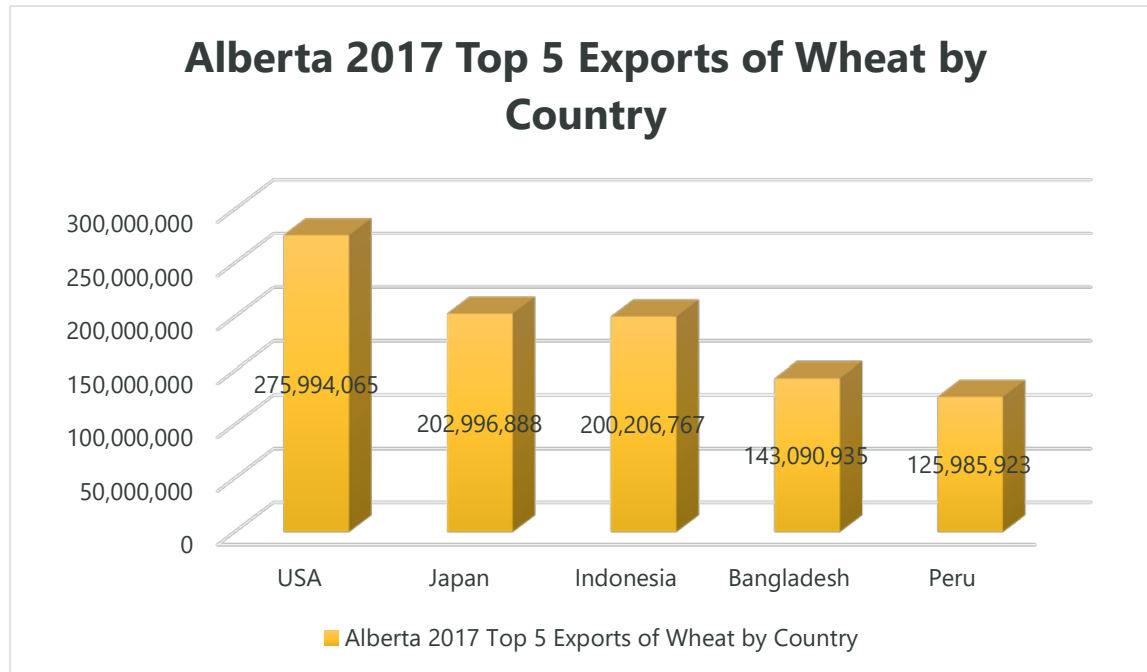
What are the Health Benefits of Wheat?

- Wheat is a grass widely cultivated for its seed; a cereal grain which is a worldwide staple food. White and whole-wheat flour are key ingredients in baked goods, such as bread.
- Wheat is highly controversial because it contains a protein called gluten, which can trigger a harmful immune response in predisposed individuals. However, for people who tolerate it, whole-grain wheat can be a rich source of various antioxidants, vitamins, minerals, and fiber.
- Wheat is mainly composed of carbs but also has moderate amounts of protein. Carbs are the main nutritional component of wheat. Still, this grain harbors significant amounts of fiber, which may aid in digestion. Its protein mostly comes in the form of gluten.
- Whole wheat is a good source of several vitamins and minerals, such as iron, thiamine, niacin, calcium, and vitamin B6. As with most cereal grains, the amount of mineral depends on the soil in which it is grown, which is why the Peace Country is renowned for its superior products.



Wheat Exports

Top five wheat producers are the European Union, China, India, Russia and United States. Canada falls in at number 7, producing 29.3 million tons annually. 948,882 acres of land in North West Alberta in 2017 produced 1,162,200 tons of wheat for export. Northern Sunrise County had 55,349 acres of land allocated for wheat production in 2017.



Sourced from PREDA Northwest Agricultural Report

Opportunities for Value Added Agricultural for Wheat

There is a growing demand for 'Made in Canada' and locally distilled beverages. Wheat, barley, hops, potatoes and rye are grown locally and support the production of craft and premium beers and spirits. Alberta has experienced rapid growth in micro-brewing and local distilleries, thanks in part to the growing international recognition of the quality of Canadian alcohol.

1. Alcohol produced from wheat has several industrial uses and plays a role in many of the most widely consumed spirits.



- **Vodka** - There is a longstanding assumption that vodka is made from potatoes, and historically that was true. However, potato-based vodkas are now rare, and the majority are distilled from grain. Wheat, barley and rye are all common choices, thanks to their widespread availability and low cost when purchased in commercial quantities. Several of the most recognizable vodkas are distilled from wheat, including iconic brands Absolut, Stolichnaya and Ketel One. Many others use wheat as part of a mixture with rye and barley.
- **Gin** - Gin is another clear, clean-tasting grain alcohol like vodka. The major difference between gin and vodka is that gin is flavored with juniper berries and other aromatic ingredients, which vary from one manufacturer to another. Premium gins are usually distilled from mixtures of wheat, rye and barley, but with the wheat and rye predominating to give a light, dry finish.
- **Whiskey** - Whiskeys made largely or entirely from wheat are usually made by small-scale craft distilleries, rather than major players in the industry. They typically have a light, delicate and dry flavor, much prized by serious aficionados.

Distilleries in Alberta

Alberta Distillers Limited – Calgary
Strathcona Spirits Distillery- Edmonton
Highwood Distillers- Calgary
Rig Hand Distillery- Nisku
Eau Claire Distillery – Turner Valley
Secret Barrel Distillery – Spruce Grove
Raw Distillery & Brewhouse – Canmore
Hansen Distillery – Edmonton
Black Diamond Distillery – Edmonton
Red Cup Distillery – Edmonton
Summer Love Vodka – Calgary

West of the 5th Distillery - Barrhead
Elk Island Spirits Co. – Sherwood Park
Wild Life Distillery – Canmore
Krang Spirits Inc – Cochrane
Cold Lake Brewing & Distilling Co. – Cold Lake
Bridgeland Distillery Inc – Calgary
Broken Oak Distilling Co – Grande Prairie
Latitude 55 Distilling Co – Grande Prairie
MD Distillery Ltd - Grande Prairie
Rocky Mountain Big Horn Distillery –
Yellowhead County

More details of each distillery can be found on this link:

https://www.google.com/search?rlz=1C1CHBF_enCA814CA814&q=distilleries%20in%20alberta&npsic=0&rflfq=1&rlha=0&rllaq=52270082,-113759619,139773&tbm=lcl&ved=2ahUKEwjdraqr3aLrAhWHrJ4KHRIIBx4QjGp6BAgLEEk&rlodoc=1&tbs=lf:!1m4!1u3!2m2!3m1!1e1!1



Peas



What are the Health Benefits of Peas?

- Peas, because they are a legume, are naturally high in protein containing 5.5g per 100g portion, and fibre at 5.6g per 100g. They are low in fat, just 1.6g per 100g, low in carbohydrates at 10g per 100g, and low in calories with 79 calories per 100g. Their low carbohydrate content also means they are naturally low in sugar with just 1.2g per 100g.
- Nutritionally, peas are a good source of vitamins and minerals. In particular they are a good vegan source of iron which is needed for making new red blood cells and transporting oxygen around the body, and vitamin B, which helps us convert the energy from our food.
- They are also a good source of phosphorous with a 100g portion providing over 20% of our daily requirement. We need phosphorus to help build strong bones and teeth.
- Peas also contain the phytonutrients lutein and zeaxanthin, which have both been shown to provide benefits to eye health and reduce the risk of macular degeneration and eye-related diseases.



Pulse Crops

Field peas are a pulse crop that is part of the legume family. The word “pulse” comes from the Latin word *pulse*, meaning potage or thick soup. Field peas are a cool season annual plant that is ideal for cool temperate zones. Field pea is the most widely grown pulse crop in Alberta and is grown in Southern Alberta, Central Alberta, and the Peace River Region.

In 2019, Alberta’s pulse growers grew 1,685,900 metric tons of field peas on 1,743,300 acres with farm cash receipts of \$387 million. Alberta dry pea exports were valued at \$508 million with China accounting for the majority of exports at \$294 million, Bangladesh at \$105 million, followed by India (\$30 million), Cuba (\$20 million), United States (\$15 million), Nepal (\$10 million), as well as Colombia, Pakistan, Taiwan, Philippines and other countries.

The global health and wellness food market is projected to increase up to \$811.82 trillion US dollars by 2022. High protein pulse crops are an important part of the diets in regions with the fastest population growth, namely India, Africa, the Middle East, and Central and Latin America. The recent recognition of the health risks of sugar consumption also flavours adoption of low glycemic index foods such as pulses.

Uses

Field peas are primarily used for human consumption or livestock feed. Research has shown that field peas are an excellent protein supplement in swine, beef cow and feeder calf, dairy and poultry rations. Field peas have high levels of the amino acids, lysine and tryptophan compared to cereal grains. Field peas contain approximately 21 to 25 percent protein. Peas contain high levels of carbohydrates, are low in fiber and contain 86 to 87 percent total digestible nutrients, which makes them an excellent livestock feed. Field peas also contain 5 to 20 percent less of the trypsin inhibitors than soybean. This allows it to be fed directly to livestock without having to go through the extrusion heating process.

Field peas are often cracked or ground and added to cereal grain rations.

Global demand for pulse crops such as a dry field pea is increasing as a cheap source of protein and exponential population growth: especially in India. The Canada Health Food Guide has also declared “plant protein” as a good source of protein.



Opportunities for Value Added Agricultural for Peas

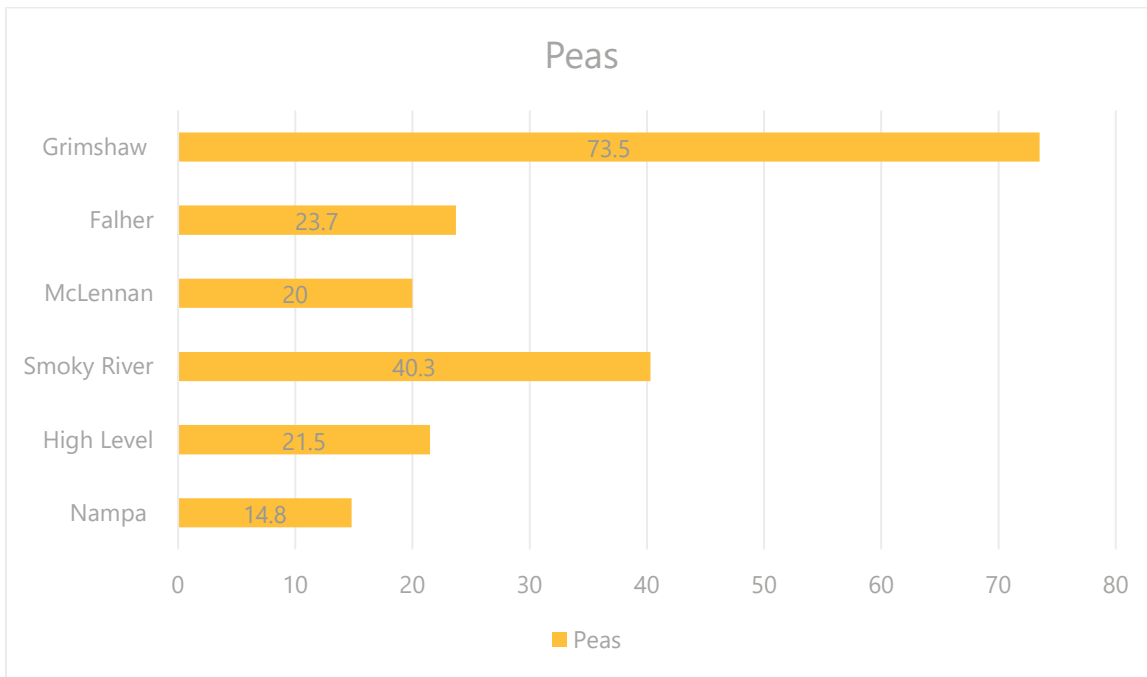
1. Pulse Ingredients Manufacturers - Milling to produce flours and further fractionation to extract proteins, starches, and fibre. Utilization in pastas and breads to increase fibre and protein. (China is quite interested in a small inclusion rate of pulse flour in their 40 million tonnes wheat flour market.) Pea starch has many probiotic benefits.
2. Food Manufacturers - Consumer food products such as spreads and baked foods.
3. Production of protein concentrates and isolates for use in livestock feeds.
4. Pet food manufacturing plant.
5. Beyond Meat manufacturing plant is using protein isolates and pea flour in their product. Beyond Meat is the tip of the iceberg. There is a huge opportunity to blend plant-based protein, with animal protein e.g., pea and meat protein together in a meat product.

Pea processing plant - Currently the Regional Economic Development Initiative for Northwest Alberta (REDI) and Mackenzie County are working on a \$28 million pea processing facility in Mackenzie County. However, the success of this proposed project depends on investment from local pea producers and government grant money.

Leduc Food Processing Development Centre is conducting research and development with pulse crops.



**Northwest Alberta - Deliveries of Peas to Primary Elevators
2017-2018 in Metric Tons**



Source: PREDA's Northwest AB Commodity Export Report



Barley



What are the health benefits of barley?

Consuming a diet rich in whole grains may help reduce the risk of obesity, diabetes, heart disease, certain types of cancer, and other chronic health concerns.

Barley's potassium, folate, iron, and vitamin B-6 content, together with its lack of cholesterol, all support cardiovascular functions. Other studies have indicated that eating a diet rich in these nutrients may help reduce heart disease risk factors such as high blood pressure.

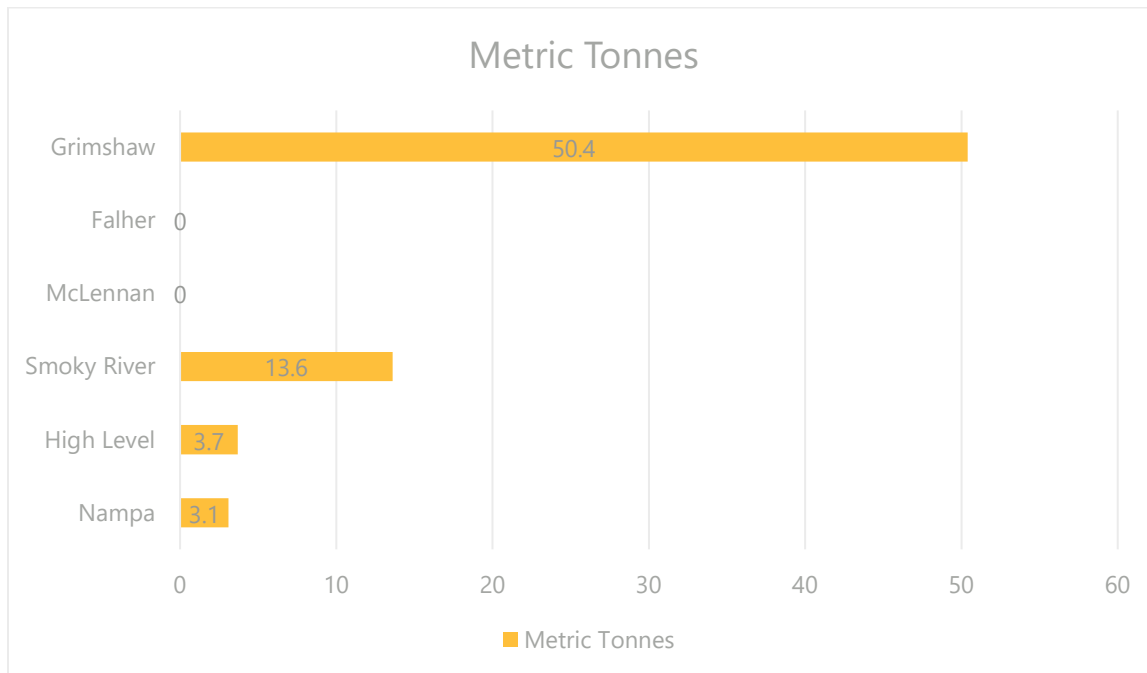
Barley is a cereal grain that people can use in bread, beverages, stews, and other dishes. As a whole grain, barley provides fiber, vitamins, and minerals. These offer various health benefits.

Stores usually sell barley in two forms: hulled and pearled. Hulled barley undergoes minimal processing to remove only the inedible outer shell, leaving the bran and germ intact. Pearled barley has neither the hull nor the bran.

Barley is a popular animal feed due to their high protein content.



Northwest Alberta - Deliveries to Primary Elevators



Source from PREDA's Northwest Alberta Commodity Exports

Opportunities for Value Added Agricultural for Barley

1. Brewery - Malt barley to meet the growing demand for specialized malt for the craft brewing industry. It takes 34 kg (75 lbs.) of barley to produce a barrel (79.5 liters) of pale ale.
2. There is no processing plant for barley in the Northwest; all barley that leaves the region is sent to processors elsewhere in Alberta or Canada.

Local breweries in the Peace Country are Peace River Brewing, Heilan Beer House in Fairview, and in Grande Prairie, Grain Bin Brewing Company and GP Brewing Co.



Fescue/Forage Seed



Creeping red fescue is a hardy, low growing, creeping rooted grass that will form a dense sod. It performs well on varying soil types, tolerates shady conditions and is primarily used as a turf grass. Fescues are used as turf grasses and as pasture and hay for livestock, being a highly nutritious stock feed. 90% of Alberta's fescue seeds are sold to the US with the vast majority being bought by Oregon. Oregon has a grassland coalition made up of numerous brokers that either sell Alberta's fescue seeds directly or mix it with other grass seeds for turf and sod. Fescue is a forage seed crop with a high rate of protein for livestock.

Creeping red fescue is used:

- For turf purposes in lawn mixtures around homes, buildings, and in parks. Most creeping red fescue is mixed with US grown perennial ryegrass and Kentucky bluegrass as a turf mixture. Prices and availability for other "cool-season" turf grasses determine amounts of fescue going into a mixture.
- For conservation uses to seed roadsides, irrigation ditches, rights-of-way and other disturbed areas. It is used for pasture in mixes or alone in high traffic areas. Creeping red fescue is palatable and has early spring and persistent fall growth. It is considered to be one of the better species for late fall or dormant grazing as it tends to hold its feed quality well.



In Canada, virtually all the creeping red fescue production is grown in the Peace River region of Alberta and British Columbia. Seed production can vary from year to year, due to weather or other factors. Most Canadian creeping red fescue is exported. The United States is the largest market and accounts for over 85% of creeping red fescue exports.

The Canadian forage seed market is small in comparison to markets for other farm commodities. It is a less structured market. Typically, prices are established on a “bid” and “offer” system, with sellers and buyers checking offers and bids by other growers or buyers.

Although market and price information can be lacking it is available. Canadian companies provide prices for most forage seed species; however, quotes can vary depending on the company, time of year, and market conditions (supply/demand).

General principles of supply and demand work in the forage seed marketplace. To alleviate potential marketing problems, the marketing of turf, grass and legumes seed in Canada has four marketing options available to growers. The marketing alternatives are direct seed sales, contracts, brokered sales and farm gate sales.

Fescue may not be a primary crop choice for producers due to fescue prices fluctuating, growers need to be able store seed and wait for a better price.

Opportunities for Value Added Agricultural for Fescue

1. Speaking with a local grower of fescue who has been packaging his product for lawn seed and trying to sell locally, he stated he cannot compete with local stores due to the added high cost of accessing proper packaging and labeling. After speaking with a farmer from Oregon in June he found out that with everyone staying home due to Covid-19 and people working on yard improvements, the US stores have sold out of lawn seed. He now markets all his seed to Oregon, USA.
2. Forage grasses are grown in 3,102 acres in NSC while alfalfa has 9,867 acres. There is a market for forage seed and alfalfa, but farmers are reluctant due to no access to hail and crop insurance and low sale prices.
3. A facility to produce “Erosion Control Matting” used by transportation and construction companies when working alongside roadways. The matting can be produced using local straw/hemp chaff with fescue and forage seeds imbedded into the matting. Currently the matting is produced in the US.



Dairy



Northern Sunrise County is home to Enterprise Lavoie Dairy Farm, that currently milks 400 cows twice a day and a smaller operation Baars Dairy Farm. While other agriculture commodities struggle with prices, weather and disease, the dairy industry is stable. The challenges lie in keeping costs down and efficient management.

Opportunities for Value Added Agricultural for Dairy Industry

1. **Yogurt factory** - The majority of school age children and adults eat yogurt every day with their lunch or for breakfast. Frozen yogurts can also be another option to produce and sell.
2. **Cheese Curd factory** - Albertans love to buy locally made products. Poutine is readily available in all of our local restaurants and fast food franchises. St. Isidore also hosts an annual Carnival where the poutine is a must have meal at the event. They bring in their cheese curds from Quebec and regular orders are placed and sold to local residents in the Peace River area throughout the year.
3. **Ice cream factory** - Everyone loves ice cream. The factory could invent and create the most appetizing flavors you could imagine, using locally grown fruits and honey.

*All three options can have a small retail space to sell their products and showcase other products produced in the area.



Honey



Health Benefits

- Honey contains flavonoids and antioxidants which help reduce the risk of some cancers and heart disease.
- Honey reduces ulcers and other gastrointestinal disorders.
- Other benefits of honey are managing diabetes, fighting infections, boosting energy, preventing nausea, promoting weight loss and restful sleep, fighting asthma, removing dandruff and enhancing skin health.

In addition to honey production, honeybees play a vital pollination role in the yield and quality of Canadian crop production.

Bee health is a multi-dimensional, complex issue and is affected by many factors including:

- parasites
- pests and pathogens
- habitat loss and food supply
- queen bee quality
- weather
- general hive management
- exposure to pesticides



Evidence suggests that bees are increasingly stressed by combinations of these factors so solutions require coordinated, multi-faceted, multi-jurisdictional, science-based approaches.

In early June, the provincial government announced new measures to help beekeepers in Alberta deal with this year's shortage, by announcing a new [Canadian Agricultural Partnership Program](#).

The program will provide workers with \$1 million to offset the costs of increased colony replacements amid the pandemic.

Opportunities for Value Added Agricultural for Honey

The Peace Region has many beekeepers looking at other alternatives for selling their products:

- **Peace River Honey** produces Honey Bunny products and Peace River organic honey. Marketing has been very successful for the owner and you can now buy their products at Costco across Canada and Honey Bunny Inc. has been selected as a finalist in the marketing category of the Alberta Business Awards of Distinction.
- **Wolfe's Honey** and **Simoneau Honey Buzziness** produce flavored honey you can purchase at local farmers markets or purchase directly.
- **Paradis Valley Honey** has opened Valley Bee Café in the Watino Valley that uses their products in their drinks and foods. They also collect pollen for retail sales
- **MCW Apiary** produces honey, makes candles and cleans their own wax.

What opportunities are we missing?

1. Honey mead or spirits



- Fallentimber Meadery located in Cochrane, Alberta, produces traditional meads and spirits.
- Section 35, a company located near Viking, AB has distilled their honey, creating an array of uniquely flavoured alcohols.

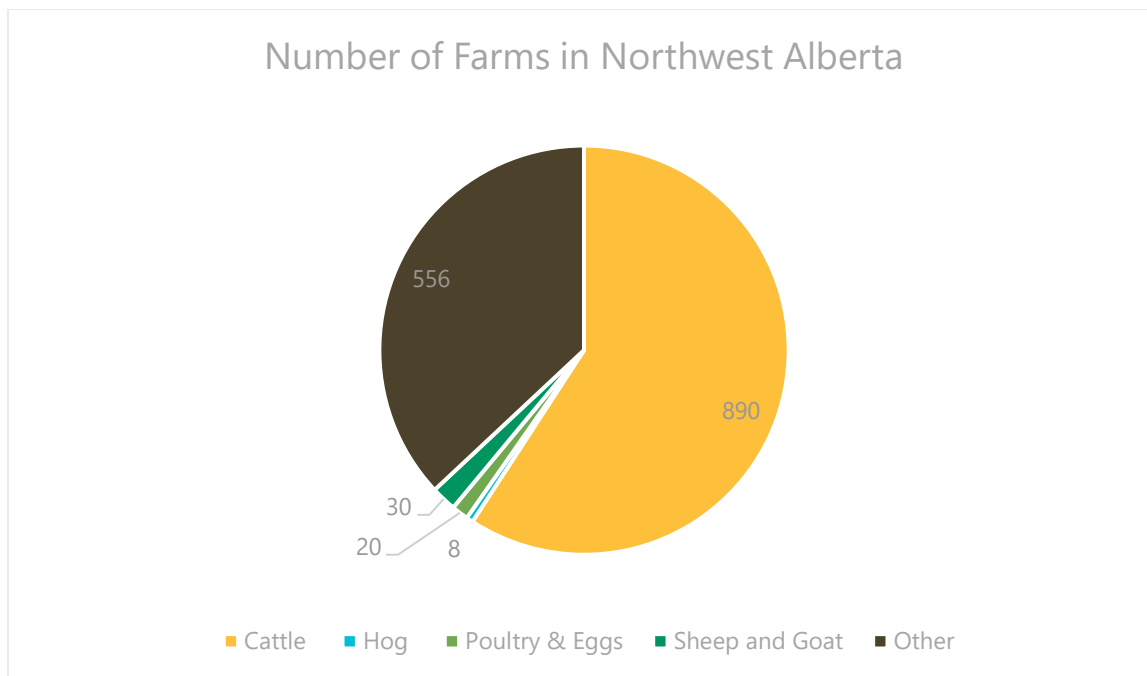
2. Skin care and beauty products with honey and the honeycomb.



Livestock



The US loves Alberta Beef: especially Californians. Even Texas, the only other place branded for its quality of “steak” imports more than \$100 million of Alberta Beef annually. Alberta is cattle country, with more than 18,000 beef cattle producers.



Predda Northwest Alberta Report



In 2006, 10,897 head of cattle and calves were recorded in the County. In 2016, the number was decreased to 5,712. Most producers are now focused on maintaining their herds, rather than trying to expand, as they struggle with shortages of hay or grass, with high prices for the limited amount of available hay and cattle prices falling.

Opportunities for Value Added Agricultural for Livestock

- 1. Abattoir with a retail space to sell packaged products** – Producers may be interested in listening to a cooperative group and see if there is potential to start an abattoir, along with a retail space to sell local meat. Producers would have to invest in this project as abattoir's are expensive and incredibly hard to staff. Johnny's Sausage used to have an abattoir, but removed that part of the operations and only processes and packages the meat for retail or private sales.
- 2. More "Farm to Table" operations** - There is one existing local business selling finished products called "Front Porch Farm" in the County. This local producer gets beef and pork processed at Johnny's Sausage in Grimshaw. For poultry, the closest option for processing is in Pigeon Lake, so they have chosen not to sell poultry meat. Most Hutterite colonies have their own inspected on-farm facilities, but no longer provide that service for others due to biosecurity. The best option for animal welfare is on-farm kill by a mobile butcher or an on-farm butcher. The regulations for an abattoir are extremely detailed with many differences between federal and provincial inspection regulations, even as crazy as the heights of doors. This could be a red tape reduction that the Alberta Government is seeking to reduce.

News Release July 29, 2020 from the Alberta Government website. New opportunities for Alberta's livestock sector. Amendments to the Meat Inspection Regulation will cut red tape and provide Albertans with greater access to locally produced meat while maintaining food safety.

The changes come as a result of consultation with industry and other stakeholders and include:

- Increased licensing options for personal use slaughter. Consumers can now buy an animal direct from the farm and have the animal slaughtered on-site for their personal consumption.



- Allowing provincially licensed meat facilities to salvage and sell meat by-products. As a result, abattoirs will be able to expand into markets that use meat by-products for human consumption, pet food and wildlife bait.
 - Allowing for video pre-slaughter inspections in emergency situations. Abattoirs will not have to wait for an appointed inspector to arrive in person on farm to perform an inspection if animal welfare is at stake.
- 3. Mobile Slaughterhouse** – In 2011, Big Lakes County purchased a mobile slaughterhouse from Olds College with the hopes of starting a cooperative among livestock farmers in the Northwest. Sheep, bison, beef and hog producers would especially benefit from the initiative. Big Lakes County did sell their mobile slaughterhouse. It was not suited for a municipality to manage, but would be a great investment for an entrepreneur.
- 4. Poultry Farm** - There is no local poultry farmer in our area. Closest would be the Hutterite Colonies from Whitemud and Codessa.



Fruit and Vegetable Market Gardens



Northern Sunrise County currently has four fruit and vegetable producers in our business directory. Haskap berries, saskatoons, raspberries, strawberries, cherries, tomatoes and cucumbers are all produced seasonally and sold at farmers markets and through private sales.

The Junction ice cream store in Grimshaw does sell a haskap ice cream in which the fruit is locally sourced.

Opportunities for Value Added Agricultural for Fruit and Vegetables

1. **Winery** - We do have a variety of fruit grown in our County that can be used to produce wine. High Prairie's Shady Orchard and Winery has been selling their product and growing their orchard every year with varieties of fruit trees. Northern Sunrise County did have a local fruit market producer interested in starting a winery, but AGLC would not let them produce wine in an attached building to their home. The wine must be processed in a detached building. This could be an opportunity for the Alberta Government to reduce red tape.
2. **Hydroponic Micro-Groweries** - Most people enjoy fresh, locally grown produce, but in the winter when the ground is frozen those products are only available trucked in from places like California or Mexico and they are anything but local, or fresh. Available now are stainless-steel shipping containers that allow you to grow produce hydroponically year-round. These small growing facilities are successful in the cold climates in the NWT and there is a successful Westlock entrepreneur. I have also been in contact with a Mackenzie BC entrepreneur who is working with their local college on developing container to sell to individuals at a lower cost.



3. **Community Shared Agriculture (CSA)** - CSA is a food production and distribution system that directly connects farmers and consumers. In short: people buy "shares" of a farm's harvest in advance and then receives a portion of the crops as they are harvested. CSA has used vegetables, fruits, honey, eggs, cheese, and meat producers to make the weekly food boxes.

Local Food Infrastructure Fund - The Local Food Infrastructure Fund (LFIF) is a five-year, \$50 million initiative ending March 31, 2024. The program is part of the Government of Canada's Food Policy which is Canada's roadmap for a healthier and more sustainable food system in Canada. The LFIF objective is to strengthen food systems and to facilitate access to safe and nutritious food for at-risk populations.

The LFIF's objectives are to:

- improve access to safe, healthy and culturally-diverse food while promoting community development
- support local economies
- improve health outcomes for Canadians most at-risk
- promote environmentally sustainable food systems

The fund supports community-based, not-for-profit organizations to improve their food systems through investments in infrastructure that are directly related to addressing food insecurities and increasing the accessibility of healthy, nutritious, and ideally, local foods within their community.



Hemp



The Canadian Hemp Trade Alliance (CHTA) expects the main production areas in Alberta to be the irrigation area in Southern Alberta, the area along and north of Hwy 16 and also in the Peace River region. Ideally, there should be a chaff processing plant every 50 to 150 km from Edmonton to Lloydminster, plus one or more in the Peace River area and one in southern Alberta. Each hemp chaff processing plant could potentially include a cluster of spinoff businesses to process chaff. True North at Oyen is currently pelletizing residue from hemp processing and using it in a co-generation power plant. The Peace River region is not suited to grow the seed, but hemp chaff can be grown for its fibre.

Opportunities for Value Added Agricultural for Hemp

Whole plant utilization of hemp to produce fibre and fractions including:

1. Hemp chaff residuals will likely be used for livestock feed, but this use is not yet approved. Livestock feeding approvals will also create markets for off-grade seed and eventually the use of immature hemp for grazing. More research is needed to determine what may be contained in the plant at that early life stage.
2. Hemp fibre production from the straw. A bio composites group located in Drayton Valley is taking the fibre and are using it to make composites.



Within the next five to ten years there may be potential for the development of several hemp chaff processing plants in the North. However, this industry will face some growing pains and the early entrants may not flourish while the markets (and the related regulatory framework) are still being developed.

Conceil de Développement Économique de L'Aberta is currently working with a group of Northern Sunrise County entrepreneurs to help purchase a decortication plant. They have purchased Hemp seeds and will be seeding in 2021. They are currently looking for a location that can house the mobile decortication plant with 20 acres to store the Hemp bales. After establishing themselves, they plan to purchase a small plant that will use the fibre for insulation for construction. Alberta currently does not have Hemp insulation approved for use in construction. Alberta Hemp Alliance is working on the regulations to allow Hemp building products to be certified to use in Alberta.



Agri-Tourism



Defining “Agri-Tourism” - The term is often used to refer to any tourism activity occurring in rural areas where agricultural production and farming occur, including farmers markets, agricultural fairs, and culinary tourism (food festivals or harvest celebration events). In many European countries, agri-tourism consists primarily of lodging and meals on the farm, often referred to as “farm holidays” or “farm inns” or putting on festivals, concerts and weddings. Dude ranches, pumpkin farms, corn mazes, u-pick fruit operations, nature study, fishing, bird-watching – conceptually the range of activities that could be defined as agri-tourism is extensive.

Trends in Tourism and Opportunities for Agriculture

Wherever visitors originate from, tourism trends point to a new type of visitor, i.e., consumers seeking experiential, life-enriching vacations that involve culture, nature, the outdoors and learning. Travel Alberta identifies key segments of the tourism market and what tourists look for in choosing a vacation. Thirty-five percent of the global tourism market is described as “Learners” – tourists interested in history, connecting with their roots, and seeking out cultural and historical aspects of their destinations. These visitors want authentic experiences that focus on local culture and foods, allowing them to engage all of their senses. They want to get behind the scenes and be enriched by the people and places they visit.



Agri-Tourism targets Free Spirits, Cultural Explorers and Authentic Experiencers – many of whom seek experiences that are off the beaten track, provide an opportunity to connect with locals, have an educational component and include dining at restaurants offering local ingredients, visiting farmers' markets and local artisans.

Some farmers are adapting to the challenges facing their industry; including finding new ways to get their products to consumers, focusing on growing new types of crops, incorporating organic growing methods, and adapting crop and livestock production to evolving consumer tastes and increased interest in culinary tourism. Changing consumer eating habits have spawned an interest in purchasing locally-grown foods, knowing where their food comes from and how it is produced. The “100-mile diet” (purchasing only foods that have been grown within a 100-mile radius of home) is contributing to increased business at farmers’ markets.

The economic benefits of agri-tourism have been demonstrated in a number of countries around the world. The United Kingdom, Australia and New Zealand, Switzerland, France, the Netherlands, and the United States are countries where significant agri-tourism activity is occurring.

The Alberta Government has stated that they would like to see an increase in Alberta Tourism of 32 percent from \$7.8 billion to \$10.3 billion in the next five years. More information on grants or programs will be announced after Covid-19 is over.

The Taste of the Peace event in Grande Prairie gave locals and elected officials during the Growing the North Conference, an opportunity to sample local food, purchase products and meet with over fifteen local growers, producers and industry representatives from the Peace Country. Although this event was not hosted at this year’s conference, it would be a good opportunity to host in future years.





What Other Municipalities Are Doing?

CARES grants have been awarded to the following municipalities.

- MD of Spirit River - Business plan for Pulse Processing facility \$25,000 - 2018
- Canola Crush and Refining Facility Business Case \$25,00 - 2017
- Mackenzie County - Mackenzie Regional Agricultural Investment Attraction Plan \$57,000 - 2018
- Battle River Alliance for Economic Development (Camrose) phase 1 Value-added Agricultural Cluster Project - 2018
- Town of Falher - Industrial Hemp Business Case Study \$25,000 - 2018
- The Van Horne Institute - Peace Region - Access to Container Transportation Project \$90,300 (Conducting a network optimization study to promote trade partnerships and efficient rail truck transport operations in Northern Alberta) 2017. Unfortunately, this project did not move forward, and the grant dollars were returned to the province.
- Conseil de Développement Économique de L'Alberta - Northern Alberta Hemp Processing Initiative \$200,000 - 2017
- Lethbridge Economic Development Initiative Society - Agri-food Processing Capacity Development Project \$1,000,000 - 2017
- Town of Valleyview - Grow Valleyview Local Economic Development Strategy \$28,925. Development of a market feasibility analysis and business plan to address key economic development priorities - 2017

Drayton Valley Bio-Mile was established in order to attract businesses from the emerging bio-economy. It is designed to provide a home to companies, organizations and research partnerships focusing on creating new products from waste products including bio-mass from the forestry and agriculture industries.

The Town of Fairview, in partnership with the Municipal District of Fairview #136, has launched a Regional Economic Growth project. The goal of this project is to identify local business opportunities that will increase economic growth and prosperity in the Fairview region. The project is called “thrive835”, blending together the spirit of Fairview and its community with the local telephone exchange.

Lac Cardinal Regional Economic Development has hired a consultant to build a business plan for a brewery and bottled water facility. The plan will be available to an entrepreneur who would like to invest in the region.



Battle River Alliance for Economic Development (BRAED) has recently released an RFP for their project: Value Added Agriculture Investor Attraction. This project is the next phase of a three-year program to investigate potential for value-added agriculture in the BRAED region. In earlier phases of the BRAED Value-added Agriculture Initiative, three broad categories of opportunities having high potential for the BRAED region were identified:

- 1. Plant-based protein opportunities**
- 2. Milling and fractionation of peas, fababeans and other pulses**
- 3. Canola-related opportunities**

This current phase of BRAED 's initiative, Developing the Value Proposition, will result in three value-added agriculture value-propositions for the BRAED region which will include individual community opportunity prospectuses. These regional value-propositions will be investor-ready and will become part of BRAED's regional investment attraction tool kit. Each BRAED member community will have the opportunity to identify their preferred investment opportunity. This community-identified opportunity will be developed as a robust opportunity prospect which will become an addendum to the applicable regionally based value proposition.



Grants and Programs

Canadian Agricultural Partnership

In Alberta, the Canadian Agricultural Partnership represents a federal - provincial investment of \$406 million in strategic programs and initiatives for the agricultural sector. In consultation with stakeholders, programs were developed under five themes: Environmental Sustainability and Climate Change; Products, Market Growth and Diversification; Science and Research; Risk Management; and Public Trust. The programs receive and review applications on a continuous basis.

These programs provide grants on a cost-shared basis to cover Eligible Expenses on approved Projects.

- Non-capital eligible expenses 50% grant/50% applicant.
- Capital eligible expenses shared 20% grant/80% applicant.
- Maximum \$250,000 grant per applicant in a fiscal year, April-March.
- Maximum \$500,000 per Applicant during the Program term.

Programs Accepting Applications Include:

1. **Accelerating the Advancement of Agricultural Innovation** Program is to support activities that demonstrate the feasibility and potential for real world application of innovations that are new to Alberta or new to the agriculture sector. This program is one of two in the Science and Research theme within the Canadian Agricultural Partnership in Alberta.
 - Advance effective environmental stewardship
 - Be a catalyst for economic development and competitiveness
 - Provide domestic and international assurance/public safety
2. **Adapting Innovative Solutions in Agriculture** The purpose of the Adapting Innovative Solutions in Agriculture Program is to support activities that take innovations that have proven to work outside of Alberta or in industries other than the agriculture industry, and adapt those Innovations so that they can be used under Alberta-specific conditions and/or in a specific Alberta Agriculture sector. This program



is one of two in the Science and Research theme within the Canadian Agricultural Partnership.

- Advance effective environmental stewardship
 - Be a catalyst for economic development and competitiveness
 - Provide domestic and international assurance/public safety
3. **Agriculture and Food Sustainability Assurance Initiatives** The Agriculture and Food Sustainability Assurance Initiatives Program will support industry associations and industry-led non-profit assurance initiatives to develop and enhance sustainability certification or assurance systems to demonstrate to the public the quality, safety and sustainability of products produced by producers and food companies.
- benchmarking studies including life cycle analyses, environmental foot-printing and gap analyses.
 - short-term funding for operating costs related to pilot studies, audits.
 - development of governance.
 - administrative support directly associated with the Project.
 - promotion of label and certification standard associated with the sustainability assurance initiative.
 - support for industry organizations to develop sustainability assurance programs; and
 - support communication efforts regarding consumer perceptions, verification standards, BMPs and performance metrics.
4. **Public Agriculture Literacy** This program supports initiatives that build industry communication capacity to increase the public and consumers' awareness and understanding of agriculture and the food production system.
- planning, organizing and hosting agriculture literacy awareness summits, workshops and conferences.
 - recruitment and training of agriculture industry spokesperson.
 - development of resources such as videos, website, educational materials, displays, publication and other awareness and educational resources.
 - development and implementation of strategic communication campaigns; and
 - benchmarking studies or needs assessments.



Alberta announced on June 30, 2020 a Recovery Plan: Investing in the agri-food sector

- The government is investing \$27.8 million in an agri-food hub at Exhibition Park in Lethbridge to create jobs and spur investment in the agriculture and agri-food industry.
- Government has introduced Bill 33, the Alberta Investment Attraction Act, which would help drive high-impact investment to the province and create jobs. The Alberta Corporation will help promote Alberta as a prime investment location for business across Canada and internationally.
- Job creation tax cut from 10% down to 8%. This will make Alberta the most attractive environment for new business investment in Canada.
- Implement sector specific strategies to drive diversification in Agriculture and other industries.
- Effective January 1, 2021, Alberta's government is introducing the Innovation Employment Grant (IEG). This program will promote economic growth and job creation by supporting small and medium-sized businesses that invest in research and development (R&D). Providing up to 20 per cent of R&D spending.

The Federal Government announced in November 2018, that \$150 million dollars was allocated toward the Plant Protein Supercluster, with an aim of increasing the production and processing of value-added plant proteins with the intent of delivering to foreign markets. The funding will be matched dollar for dollar by the private sector.

To capitalize on this opportunity there must be multiple business cases completed on each type of our protein crops. The market investigation will strengthen our ability to increase existing infrastructure and to additional infrastructure to process crops within the northwest region.

Protein Industries Canada, based in Saskatchewan, was one of nine finalists announced for a piece of \$950 million in government funding. Agriculture was well represented in both the protein cluster and the tech-laden smart agri-food supercluster (Alberta-based), but only the protein cluster was successful.

The other four successful clusters include: oceans (Atlantic Canada), artificial intelligence (Quebec), manufacturing (Ontario), and digital technology (B.C.).

As part of the process for the application of this grant program, municipalities have applied for a CARES grant to help fund the business cases. It is unsure if the CARES grant will be available in October 2020, as May 2020 did not have an intake for this grant.



Diversification Strategy

The County conducted a **Northern Sunrise County Strategies for Economic Diversification** in 2016 with Plan Alberta.

Strategies and opportunities mentioned in the strategy to consider agriculture value - added opportunities include:

- Food manufacturing incubator and research centre
- Anhydrous fertilizer plant
- Dry fertilizer plant
- Dehulling oats
- Grains processed to shelf ready
- St. Isidore hay plant expansion
- Additional hay plant
- Export-ready businesses
- Honey processed to granola bars
- Honey for veterinary purposes
- Brewery
- Poultry processing
- Commercial building for the use of beekeepers, bakers and others to produce value-added products
- Export-ready businesses
- Build on specialty foods being produced in the area including gluten free/vegan/egg free baking, tourtière, sauerkraut and perogy

Also provided with this report is the 2016 Northern Sunrise Strategies for Economic Diversification



Conclusion

Benefits created for Northern Sunrise Producers

Farmers would hopefully share in the increased value that would be created from new demand for existing crops and/or from opportunities to grow new crops, which would diversify their cropping options. Having increased cropping options and local demand for their crops would be expected to increase market diversification and price stability. Some farmers may become investors in new processing businesses, thereby diversifying their operations and potentially creating new revenue/profit streams.

Processors would create new revenue, employment and profits by establishing or expanding their processing operations to meet new market needs for ingredients or products. Each new processing operation creates the potential to stimulate a cluster of related businesses. For example, a new hemp fibre processing operation may support a chaff processing facility and a co-stream operation that would use the crop residues to make biochar or other valuable products. These businesses, in turn, would create new demand for trucking and other services in the local area.

The general public would benefit from increased employment opportunities and the economic impact of those activities through the multiplier effect of the related spinoff employment and tax revenues that would be created.

Governments and the economy would benefit from the increased economic activity that would be created by the new production and processing activities. The resulting new tax revenues would support continued expansion of services that the citizens value.



Summary of Resources

Resources were obtained from the following websites and reports:

- Agricultural and Agri-food Canada
- Alberta Beekeepers Commission
- Alberta Farmer Express
- Canola Council of Canada
- Canadian Grain Commission
- Canada Health Food Guide
- Canadian Honey Council
- Canadian Hemp Trade Alliance
- Economics and Competitiveness Branch, Alberta Agriculture and Forestry
- Plant Protein Alliance of Alberta
- PREDA Northwest Alberta- Agricultural Commodities
- Standing Committee on Alberta's Economic Future Growing and Diversifying Alberta's Agri-food and Agri-business Sectors
- Statistics Canada 2016 Census of Agriculture- Farm and Farm Operator Data
- Travel Alberta
- Wikipedia