

INTRODUCTION

Saskatchewan: A Global Leader in Agricultural Trade

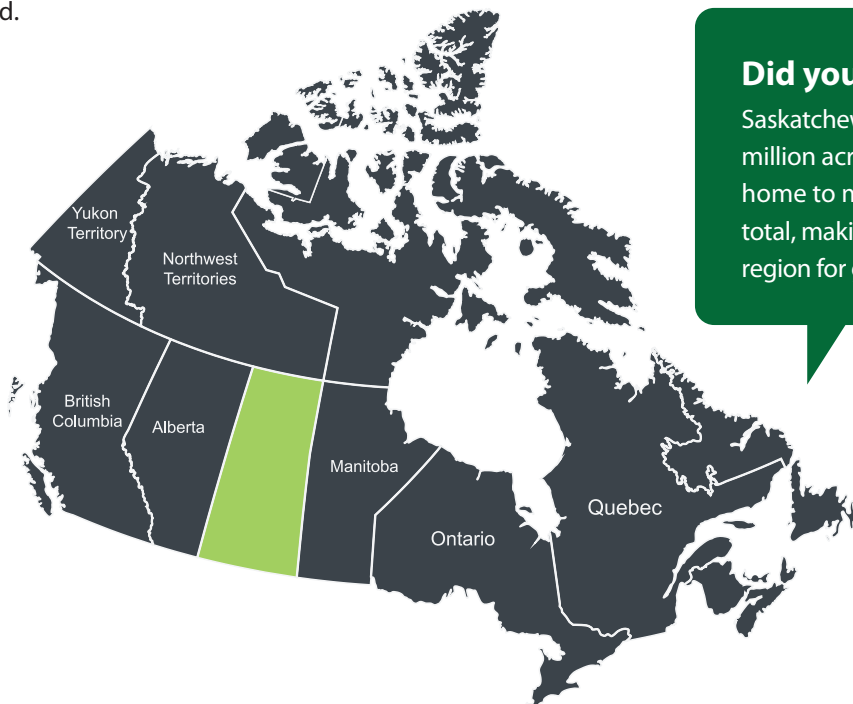
Canada is an exporting nation and our agriculture sector is well-positioned to meet customer demands all over the world. Located in the heart of the Canadian prairies, Saskatchewan is in the centre of Canada's grain, oilseeds and pulse producing and exporting region.

Canada's agriculture production is supported by a vast land base, but we have a relatively small population.

As a result, our agriculture sector exports most of the products it produces and Canada has become adept at meeting the food and agricultural demands of the world.

Canada ranks third in the world for the availability of arable land per person, which emphasizes our status as a large net exporter of agricultural products.

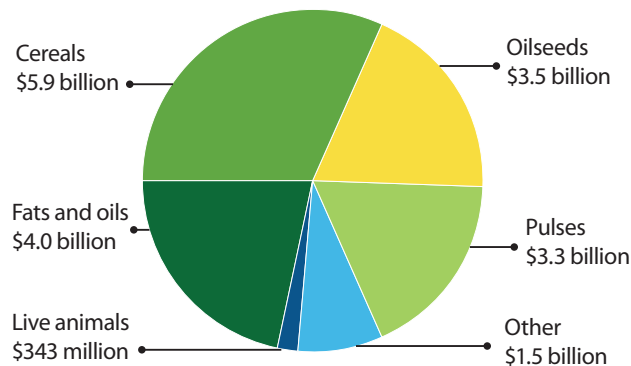
Canada's reputation for safe, high-quality agri-food products is built on the fact that Canada maintains a stringent science-based regulatory system. This system applies rigorous science-based standards to regulate food production and to monitor and control the introduction and spread of pests and disease in plants, animals and their products.



Did you know?

Saskatchewan has 18.6 million hectares (45.9 million acres) of cultivated farmland and is home to more than 40 per cent of Canada's total, making it Canada's primary growing region for grains, oilseeds and pulses.

Saskatchewan's Total 2022 Agri-Food Exports: \$18.5 Billion



Canadian agriculture has a strong tradition of research, science and innovation, which has led to the development of canola, beef and pork renowned for its quality, and wheat that consistently meets customers' highest demands. Saskatchewan is known for being a leader in crop and livestock genetics, and agriculture research.

Saskatchewan is home to world-class agricultural exhibitions, including Canadian Western Agribition, Canada's Farm Show, Ag in Motion and Crop Production Show to showcase Saskatchewan to large international and domestic audiences.

Rich soil, clean air and sunshine combined with the vast, open prairie of Saskatchewan work together to provide an excellent environment for crop and livestock production. Winter's cold temperatures mean our pesticide use can be significantly lower than it is in many other countries.

By the Numbers

- More than 650,000 square kilometres (251,000 square miles) of open prairie in the south, vast boreal forest in the north and countless lakes and rivers throughout.
- Abundant supply of fresh water, covering 5.9 million hectares (14.7 million acres).
- More than 6 million hectares of pasture and land dedicated to permanent cover for forage crops.
- Home to 34,128 farms.

Environmental Sustainability

- Our agriculture industry is reducing greenhouse gas emission intensity through continued investments in research and adoption of new technology and practices.
- Saskatchewan sequesters more carbon in our agricultural soils than any other province in Canada.

- As of 2023, Saskatchewan agricultural producers sequestered about 15.6 million tonnes of CO₂ equivalent annually in agricultural soils from practices such as increasing crop productivity, converting cropland to grassland, and implementing zero and minimum tillage.

Global Reach

- Saskatchewan is centrally located in North America to global supply chains that allow local products to be exported worldwide.
- We have an extensive rail and road transportation infrastructure that offers easy access to ports leading to global markets.

Production and Exports

- Saskatchewan farmers produce 21.2 million metric tonnes of cereal grains, oilseeds and pulses.
- This results in Saskatchewan agricultural exports of \$18.5 billion, accounting for 20 per cent of national agri-food exports in 2022.
- Agri-food accounts for over 35 per cent of Saskatchewan's annual export earnings.
- Expanding irrigation capacity to support the agri-food sector.

Regulatory System

- Stringent programs are in place to test products and ensure they comply with international standards.
- The Canadian Food Inspection Agency, a federal government body, certifies all food and agricultural goods for export.
- The Canadian Grain Commission, another federal government body, certifies the quality, safety and quantity of export shipments of Canadian grain.
- For harvest and export quality reports on Canadian grain, visit:
www.grainscanada.gc.ca/en/grain-research/export-quality/



Top Market Purchases

1. **United States:** canola oil, canola meal, durum, oats, live cattle, worked oats
2. **China:** canola seed, dry peas, barley, wheat*, canola meal, canola oil
3. **Japan:** canola seed, wheat*, durum, soybeans, canola oil, malt
4. **Mexico:** canola seed, canola oil, wheat*, malt, canary seed, lentils
5. **Algeria:** durum, soybeans, lentils, canary seeds, dry peas

Saskatchewan: A World Leader in the Supply of Safe, Quality Food

Top 15 export markets*

• United States	\$6.2 billion
• China	\$3.3 billion
• Japan	\$1.2 billion
• Mexico	\$992 million
• Algeria	\$575 million
• Italy	\$506 million
• Morocco	\$449 million
• India	\$393 million
• Turkey	\$392 million
• Bangladesh	\$387 million
• Colombia	\$368 million
• United Arab Emirates	\$363 million
• Indonesia	\$306 million
• Peru	\$288 million
• Pakistan	\$279 million

Did you know?

- In 2022, Saskatchewan exported more than \$3.3 billion in each of our key agricultural sectors: oilseeds, pulses, cereal grains and edible oils.
- Red spring wheat made up over 91 per cent of our wheat* exports in 2022.
- We also export a significant amount of canola seed, durum, canola oil, lentils, dry peas, canola meal, oats, barley, soybeans, livestock and flaxseed.

**Includes all wheat classes except durum, 2022 data*

Did you know?

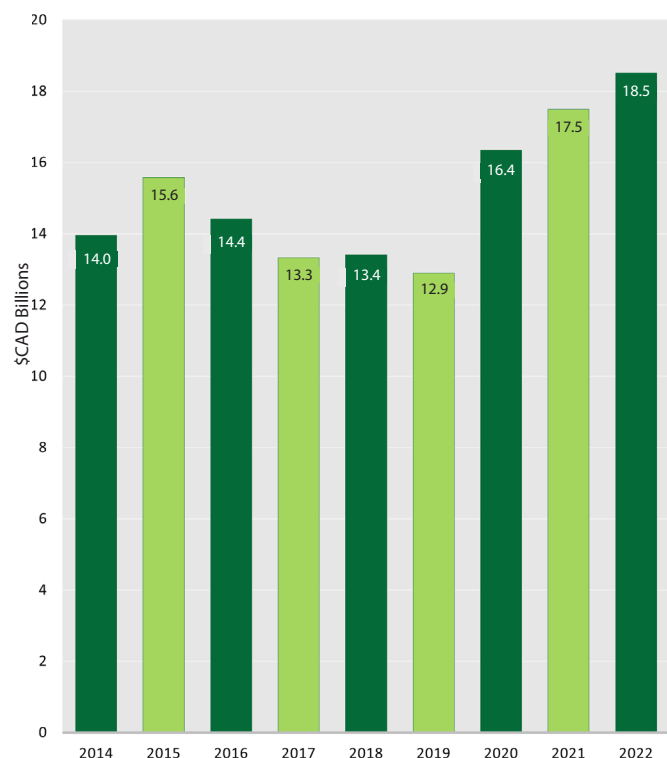
Saskatchewan exports more than \$312 million worth of agricultural products to each of these American states.**

- California
- Ohio
- Illinois
- Iowa
- Minnesota
- Georgia

***2022 data*



Saskatchewan Agri-Food Exports to the World 2013-2022





The Saskatchewan Trade and Export Partnership (STEP)

STEP is a non-profit, member-driven organization that champions the province's export industry and assists Saskatchewan businesses with realizing global marketing opportunities.

www.sasktrade.com

Why Buy Saskatchewan Agricultural Products?

Saskatchewan is a leading supplier of agricultural products for some of the world's fastest growing countries, including China and India. Saskatchewan has a reliable transportation system that allows us to deliver products and meet market demands. Saskatchewan has high standards and strict assurance protocols for safety, quality and dependability. We expect the very best from our producers and food processors. Our food and agricultural products reflect our deep commitment to animal welfare, health, safety, environmental responsibility and a sustainable future for all.

Saskatchewan Leads the World as the Largest Exporter (By Value) of These Agri-Food Products



Saskatchewan is Canada's top wheat* exporting province.

In 2022, we exported \$2.8 billion, or four per cent, of the world's wheat exports.

**Includes all wheat classes except durum, 2022 data*

Strong Value-added Industry

Saskatchewan's annual revenue from value-added agriculture has increased from \$3.5 billion in 2012 to an estimated \$6.4 billion in 2021-22. The province is committed to continued growth and expansion in this processing sector. Investments in expertise, infrastructure, research and development support our role as a major player in providing food to the world. From pea protein, to oat flour, to bio-jet fuel, Saskatchewan is open for business.

Why invest in Saskatchewan?

Rising to the challenges of a growing world population, Saskatchewan is emerging as an economic powerhouse within Canada. Our province is leading the nation in many areas of economic growth. We have a high standard of living and our stable, competitive business environment provides lower risk investments, especially in the agri-food sector.

For more information on investment opportunities in Saskatchewan, contact:

The Ministry of Trade and Export Development

306-529-7910

saskatchewan.ca/invest

invest.sask@gov.sk.ca



AGRICULTURAL EXHIBITIONS

Canadian Western Agribition

A true international marketplace, Canadian Western Agribition (CWA) is held each November in Regina and is the largest livestock show in Canada. It is anchored by beef cattle but also features horses, bison, sheep, alpacas and an extensive agribusiness trade show.

This event, which regularly attracts more than 120,000 visitors, is a meeting place for people from all over the world who are interested in top-quality cattle and beef genetics.

CWA makes use of the Viterro International Trade Centre (VITC), a 150,000 square foot, multi-purpose facility, offering the most modern livestock space in Canada. Located in the VITC is the CWA International Business Centre, which is a meeting and networking space for international guests. The venue provides state-of-the-art hosting facilities featuring floor-to-ceiling windows that overlook the new show ring.

www.agribition.com

Did you know?

CWA is an international hub of agriculture excellence, hosting over 1,200 international guests from over 63 different countries. CWA is where the livestock world meets.



Did you know?

Crop Production Show has been the must-attend event for prairie farmers since 1983, making it a true leader in the field of crop science and technology.

Western Canadian Crop Production Show

Western Canada's premier grain industry showcase takes place every January in Saskatoon, and highlights the latest in technology, services, products and practices. Producers who want the latest information about grain production – from crop inputs to marketing to grain handling – make sure to attend this annual event.

www.cropproductiononline.com



Canada's Farm Show

Canada's Farm Show takes place annually in June in Regina and attracts more than 20,000 visitors each year. As one of the largest indoor trade shows in Canada, spanning 177,000 square metres, Canada's Farm Show showcases dry land farm technology and the latest in innovation. Delegations from more than 50 countries attend the show, making it an ideal opportunity for international guests to meet in-person with some of Canada's best farmers and agri-businesses.

www.canadasfarmshow.com

Did you know?

Over the five days of Ag in Motion, more than 500 exhibitors and tens of thousands of producers take in the demonstrations.

Did you know?

Canada's Farm Show brings buyers and exporters together in one location, hosting more than 500 international delegates every year.



Ag in Motion

Taking place just outside of Saskatoon every July, Ag in Motion is Western Canada's largest outdoor farm expo. The show provides an outdoor venue for progressive farmers who want to see and feel the latest in agricultural innovations all in one place. Ag in Motion brings innovations to the field through interactive exhibits and live field and crop plot demonstrations. The expo was created to empower farmers by providing the knowledge that they need to make informed decisions.

www.aginmotion.ca



AGRI-PROCESSING

Saskatchewan's ability to produce a diverse array of agricultural crops provides the basis for establishing a vibrant food, beverage and bioproducts processing industry.

With our strengths in primary production and a growing demand for high-quality food and agricultural products, the timing is right for Saskatchewan to expand and become a leader in the value-added sector. Canada's quality control and food safety systems are world-class, which ensures Saskatchewan products meet consumers' safety and quality expectations. Saskatchewan's agricultural products, which include cereal grains, oilseeds, pulses, livestock and specialty crops, provide a direct supply of ingredients for food and beverage manufacturing.



**Estimated
\$6.4 billion
in revenue**



**Over
6,000 jobs**



**\$5.4 billion
in exports**

Saskatchewan is committed to growth and welcomes businesses with an interest in the innovative use of cereal grains, oilseeds, pulses, livestock and specialty crops. Our strength is in collaboration, seeking solutions, and utilizing the novel ingredients like proteins that consumers want.

saskatchewan.ca/agriculture

Research And Development

Investments in Saskatchewan's science sector continue to encourage research and innovation in the processing industry.

The anchors of the agri-processing cluster are the Department of Food and Bioproduct Sciences at the University of Saskatchewan's College of Agriculture and Bioresources and the Saskatchewan Food Development Centre. Five provincially-funded research chairs at the University of Saskatchewan lead research programs that develop cutting edge carbohydrate, lipid and protein applications for industry uptake, as well as developing feed processing technology and bioprocess engineering. Other key service providers for product development include Prairie Agricultural Machinery Institute, the Canadian Light Source, Ag-West Bio Inc. and Innovation Saskatchewan.



Pulses

Saskatchewan produced almost four million metric tonnes of pulses in 2022, including lentils, chickpeas and dry peas. Pulses are a cost-effective food and ingredient choice around the world. They provide a versatile source of protein to meet changing consumer preferences. Increasing demand for plant protein is fueled by a global plant-based protein market projected to grow at a compound annual growth rate of more than eight per cent between 2019 and 2025.

Pulse processing is an emerging industry in Saskatchewan, meeting the growing demand for pulse ingredients, such as protein concentrates and isolates, fibre and starch.

- Global pea demand continues to increase as consumers become more focused on health and sustainability.
- Significant opportunity exists to expand pea processing capacity, such as dry fractionation or protein isolate manufacturing, in Saskatchewan.

Cereal Grains

In 2022, Saskatchewan produced more than 40 per cent of Canada's cereal grains and was the country's top durum, wheat and oat producing province. Increased interest in cereal products will continue to drive demand for goods prepared using Saskatchewan's high-quality grain products. This provides ample opportunity for the milling and malting of cereal grains close to the source.

- Oats are an excellent source of dietary fibre. Due to the nutritional benefits and being gluten-free, there has been increased interest in using them as a functional food.



- Opportunities exist around increasing the production of semi-processed or "clipped" oats, oat protein and oat beverages.
- Saskatchewan exports seven million metric tonnes of unprocessed wheat annually. Significant opportunity exists to increase processing capacity right at the source, including the production of milled flours for breads and bakery products.
- Wheat flour can be further processed into purified starch and protein isolates (gluten) through wet processing, separation and drying.
- Saskatchewan is the world's leading exporter of durum, accounting for 33 per cent of global durum exports in 2022. Processing opportunity exists for the production of noodles, pasta and couscous.
- Saskatchewan produces 36 per cent of Canada's barley, which is used for beer (malt) and livestock feed. The province has seen consistent growth in craft breweries and distilleries in the last decade.





Oilseeds

Saskatchewan is a leader in oilseed crops, producing 74 per cent of Canada's flaxseed and 53 per cent of Canada's canola seed. Major opportunities exist in oilseed processing, which includes crushing and refining for feed, oil and additional new uses for meal.

With four commercial scale canola crush operations in the province, Saskatchewan represents close to half of Canada's canola oil and canola meal production. With almost five million metric tonnes of canola seed leaving the province unprocessed, opportunity exists to increase processing capacity in Saskatchewan. Plans to construct additional canola processing facilities in Saskatchewan have been announced, which will significantly increase the province's canola crush capacity.

- Opportunities exist from increased awareness and demand for canola meal, oil and protein internationally.
- In Saskatchewan, an opportunity may exist to bring added value to canola protein and/or through local meal utilization.

With applications in functional health foods and nutraceuticals, the popularity of flax continues to grow. The use of flax in breads, bagels and other baked goods has tripled demand for flax over the last decade. Saskatchewan produced 347,727 metric tonnes of high-quality flaxseed in 2022. This provides an abundant supply for in-province flax processing.

- Significant opportunity exists to increase capacity to crush flax to produce oil, cake, meal and other food ingredients within Saskatchewan.
- New opportunities exist around flax fibre, peptides and protein which can be used as an energy source and for the development of industrial and construction materials.

Did you know?

The Saskatchewan Food Industry Development Centre Inc. offers full service assistance to food processors wanting to add value to their products for domestic and/or international markets.
www.foodcentre.sk.ca

Emerging opportunities in canary seed, mustard and camelina processing stem from growing consumer interest in health and specialty oils. Saskatchewan's supply of safe, high quality oilseeds can be processed to meet increasing demand in this area.

Meat and Livestock

Only a small portion of Saskatchewan's market hogs and fed cattle are currently processed in-province. This creates opportunities for investment in meat processing facilities.

Saskatchewan is the second-largest beef-cattle producing province in Canada and a world-class provider of beef genetics.

- Saskatchewan has more than six million hectares of natural or seeded pasture and close proximity to feed supply.
- This access provides value-added opportunities in backgrounding and finishing cattle.

Saskatchewan has world-class hog genetics and is a low-cost production area for hogs in Canada and North America. With one of the lowest animal densities in the world, Saskatchewan has opportunities to increase hog inventories.

- A small portion of Saskatchewan's market hogs are finished in-province, creating opportunities for investment in meat and processing facilities.
- The temperature extremes in Saskatchewan help to reduce disease issues and improve biosecurity.



Did you know?

In 2017, a prairie-based initiative, Protein Industries Canada (PIC) was the recipient of \$153 million to advance plant protein innovations in Canada.

PIC is an industry-led, not-for-profit organization that aims to address the growing demand for plant protein.

Specialty Agriculture

The growing demand for medicinal herbs, essential oils, spices and culinary herbs has expanded the processing sector and created Saskatchewan health products that are exported around the world. Unique ingredients for these products include alfalfa, honey, Saskatoon berries, haskap berries, quinoa, sour cherries and specialty livestock. Access to these ingredients allows Saskatchewan processors to create innovative specialty products for consumers. This market will continue to grow as consumers look for ways to balance hectic lifestyles and healthy eating.

Saskatchewan has a small but diverse fruit and vegetable sector from which ingredients are sourced for processed products. The province produces many organic products, with almost one third of Canada's certified organic land located in Saskatchewan.

Government Support Services

The Government of Saskatchewan can provide services for new agri-businesses. These services include but are not limited to:

- Assistance with maximizing the competitiveness of your business, including path-finding for infrastructure challenges.
- Assistance with labour and skills training.
- Assistance with market development, including delivering supportive Government of Saskatchewan programming.
- Assistance in developing relationships with suppliers in your sector.
- Providing industry and community insight.

Saskatchewan Tax Rates

2%
small business
tax rate

12%
general corporate
tax rate

10%
manufacturing
corporate tax rate
(as low as)

0%
corporate capital
and payroll taxes;
no health premiums

For more information about agri-processing opportunities, contact our Value-Added Unit.

agrivalue@gov.sk.ca

CEREAL GRAINS

Long summer days and fertile soil in southern Saskatchewan provide perfect growing conditions for grain production. Saskatchewan proudly produces and exports high-quality cereal crops and is the leading grain producer in Canada.

Saskatchewan's soil is some of the healthiest in the world. Modern farming practices and cereal grain research with a focus on quality and sustainability have resulted in increased yields. Grain farmers use sophisticated soil management techniques to sustain soil quality and are overcoming historical soil erosion concerns by conserving moisture and organic matter.

Saskatchewan produces some of the world's best spring and winter wheat, due to favourable growing conditions and focused varietal standards.



saskatchewan.ca/agriculture

Did you know?

Saskatchewan produces five main types of cereal grains.

- Wheat*: for flour, bread, noodles, cookies, pastries and cakes
- Durum: for making pasta, couscous and high quality noodles
- Barley: for beer (malt), stews, soups, breads, health food and animal feed
- Oats: for flour, breakfast cereals and oatmeal and a preferred ingredient for horse feed
- Rye: for breads and spirits

**Includes all wheat classes except durum*

Cereal grains account for over 48 per cent of Saskatchewan's agri-food exports by volume, shipping 10.6 million metric tonnes to almost 100 different international markets. With the increased demand a growing global population will place on the entire food system, Saskatchewan's cereal grain production will be a key energy and protein source.

Canada has an integrated quality assurance system that includes variety registration, seed certification and grain classification, grain grading and inspection. Canada's superior quality assurance system ensures that Canadian grain is of the highest quality.

Saskatchewan
Canada 

**Did you know?**

In 2022, Saskatchewan was the world's leading exporter of durum and oats.

Export Destinations

Canada's international reputation for high-quality wheat production has developed because of decades of research, an effective quality assurance system, favourable growing conditions and the expertise of grain farmers. Since 2018, Saskatchewan has exported an average of \$5.1 billion worth of cereal grains annually.



Annual sales of Saskatchewan cereal grains to top export destinations
(average over the last five years)

By The Numbers*

- Wheat** is the most exported cereal grain, with Saskatchewan sales of \$2.8 billion.
- Saskatchewan exported \$1.8 billion worth of durum to 28 different countries.
- Saskatchewan exported \$546 million worth of barley to eight different countries.
- Saskatchewan exported \$303 million worth of oats, primarily to the United States.

*2022 data

**Includes all wheat classes except durum



Did you know?

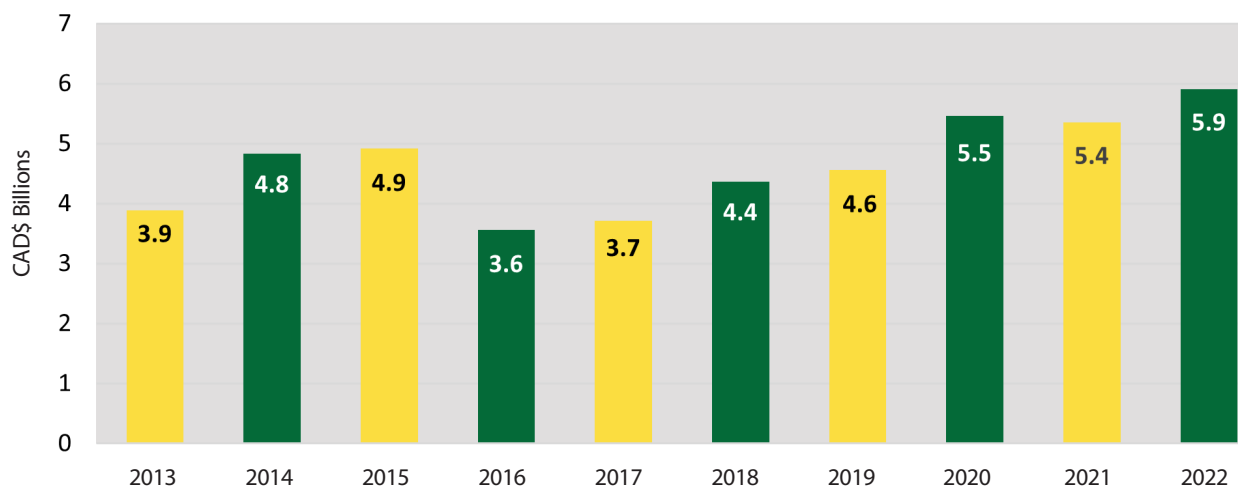
Saskatchewan is the nation's leading producer of malting barley, accounting for about half of Canadian production.



Did you know?

In 2022, Saskatchewan seeded over 7.2 million hectares (17.9 million acres) of cereal grains to produce more than 20.8 million metric tonnes. Saskatchewan is Canada's top wheat, durum and oat producing province.

Saskatchewan Cereal Grains Exports (2013-2022)





Did you know?

Most of the oats in Cheerios® breakfast cereal are grown in Saskatchewan.



Key Facts*

Saskatchewan Stats	Durum	Oats	Barley	Wheat**
Saskatchewan production (as per cent of total Canadian production)	77%	49%	36%	37%
Saskatchewan exports (as per cent of total Canadian exports)	81%	50%	52%	35%
Saskatchewan exports (as per cent of global exports)	33%	20%	4%	4%

*2021 data

**Includes all wheat classes except durum

Saskatchewan Industry Organizations

- Saskatchewan Wheat Development Commission
www.saskwheat.ca
- Saskatchewan Barley Development Commission
www.saskbarleycommission.com
- Prairie Oat Growers Association
www.poga.ca
- Saskatchewan Winter Cereals Development Commission
www.swcdc.info



INDIGENOUS AGRICULTURE

Of the 634 First Nation Reserves across Canada, 74 are located in Saskatchewan, as well as six of Canada's 11 Treaties negotiated between the Crown and First Nations. Saskatchewan is also home to a vibrant Métis Nation, with 12 regions located throughout the province.

Indigenous agriculture has a long history in Saskatchewan. Increases in agricultural land holdings on reserve and greater autonomy in land management have renewed conversations about how First Nations can realize the full economic benefits of agriculture on reserve land.



Did you know?

Canadian Western Agribition hosts an Indigenous Agriculture Summit to celebrate Indigenous culture and provide Indigenous education and experiences.



Treaty Land Entitlement

Treaty Land Entitlement settlement agreements have been signed between Canada, Saskatchewan and 33 First Nations. The current potential reserve hectares for the 33 Treaty Land Entitlements is 931 thousand hectares. To date, about 358,000 hectares of mostly agricultural land have been transferred to reserve with 573 thousand hectares outstanding.

Did you know?

Saskatchewan derived its name in 1905 from the Cree word *kisiskatchewan sipi* meaning "the swiftly flowing river."

Indigenous Agriculture

Saskatchewan First Nations and the Métis Nation-Saskatchewan have a vital role in the province's agriculture sector, encompassing crop production, livestock industry, bison and cow/calf operations, greenhouses and other opportunities. We are committed to strengthening and building respectful relationships to enable long-term sustainable growth for the entire industry.

Treaty and First Nations Lands and Métis Regions in Saskatchewan

The treaties established a fundamental political relationship between First Nations peoples and the Crown, now the Canadian government. Treaties are crucial in understanding the relationships between Indigenous peoples, Saskatchewan and Canada. This relationship continues to exist today. Treaties also provide a framework for living together and sharing the land Indigenous peoples traditionally occupied. These agreements provide foundations for ongoing co-operation and partnership to move forward together to advance reconciliation.

Treaties 2, 4, 5, 6, 8 and 10 cover the province. The federal government and First Nations signed the six treaties between the years of 1871 and 1906 in the area that is now Saskatchewan. A key component of these Treaties is the allocation of reserve land to First Nations people. Today, the Office of the Treaty Commissioner plays an important role in the interpretation and implementation of the Treaties' terms.

Did you know?

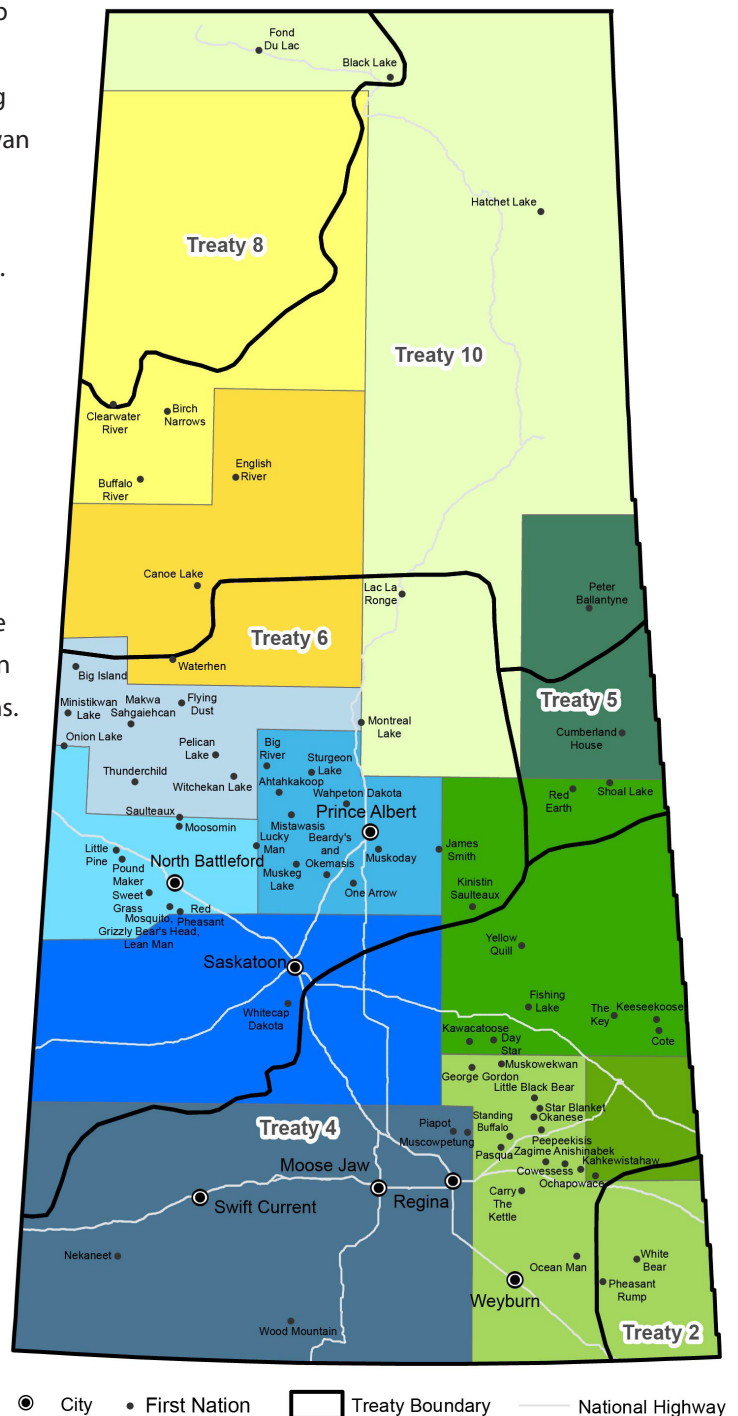
Saskatchewan has the largest First Nations agricultural land base in Canada at 1.5 million hectares.

Métis Regions

- The Métis regions in the province are divided into 12 regions with the Métis population largely living in four urban centres; Regina, Saskatoon, Prince Albert and North Battleford.
- There are close to 80,000 Métis individuals living in Saskatchewan comprising Métis Nation.
- Métis Nation-Saskatchewan is the government (federally recognized organization) that represents Métis citizens in the province.

Did you know?

Cree, Dakota, Dene (Chipewuan), Nakota (Assiniboine) and Saulteaux are the five linguistic groups of First Nations in Saskatchewan.



Métis Regions

Eastern Region 1	Northern Region 1	Western Region 1A
Eastern Region 2	Northern Region 2	Western Region 2
Eastern Region 2A	Northern Region 3	Western Region 2A
Eastern Region 3	Western Region 1	Western Region 3

IRRIGATION

Worldwide, 40 per cent of the global food supply comes from irrigated land, which comprises only 17 per cent of arable land. Saskatchewan is well-positioned to expand its irrigation capacity. The province has a relatively small irrigated land base in relation to its expansive agricultural dryland base. There are approximately 126,400 hectares of intensive irrigation within the province, accounting for less than one per cent of the arable land. There is great potential for further irrigation development out of the large reservoir, known as Lake Diefenbaker, located in the centre of the province. In addition to supporting the growth of diverse, high-value crops which increase on-farm profitability, irrigation benefits communities by increasing value-added processing opportunities, business attraction, and employment to support a profitable and sustainable economy.

Did you know?

Lake Diefenbaker has a water storage capacity of 9.4 billion cubic metres, with 4.3 billion cubic metres usable.



Did you know?

Lake Diefenbaker has a growing season average area climate of:

- 2,300 corn heat units;
- 115 frost-free days; and
- 259 millimetres of precipitation.

Lake Diefenbaker Development Area

Gardiner Dam and Lake Diefenbaker were constructed in the 1960s to secure a water source for rural and urban water supply, hydro-electric power generation, flood control, recreation opportunities and irrigation development. Fed from the snow melt in the Rocky Mountains, Lake Diefenbaker is renowned for its high-quality and safe water for irrigated crop and food production.

To date there have been approximately 59,000 hectares of irrigation developed out of the reservoir. The water used to serve these hectares accounts for less than two per cent of the annual in-flow. There is potential for at least another 200,000 hectares of development.

Irrigation farmers in Saskatchewan grow a diverse array of crops, ranging from traditional grains and oilseeds to specialty crops such as potatoes, corn, dry beans, and other fruits and vegetables.

Canada-Saskatchewan Irrigation Diversification Centre

Saskatchewan is home to a world-class irrigation research facility known as the Canada-Saskatchewan Irrigation Diversification Centre (CSIDC), located in the town of Outlook. The CSIDC research farm operates as a partnership involving both the provincial and federal governments, the University of Saskatchewan and two producer-driven industry groups: the Irrigation Crop Diversification Corporation (ICDC) and the Saskatchewan Irrigation Projects Association (SIPA). Scientists and agronomists conduct various research and demonstration projects at CSIDC, assessing new irrigation technologies and cropping practices to demonstrate to local irrigation farmers.

Irrigation farmers and districts in Saskatchewan have been quick to adopt new technologies and practices to maximize their efficiency with water applications. Since irrigation was first developed out of Lake Diefenbaker more than 40 years ago, water consumption on a per-hectare basis has decreased by 50 per cent. This “more crop per drop” trend helps irrigators and protects our valuable water resource.

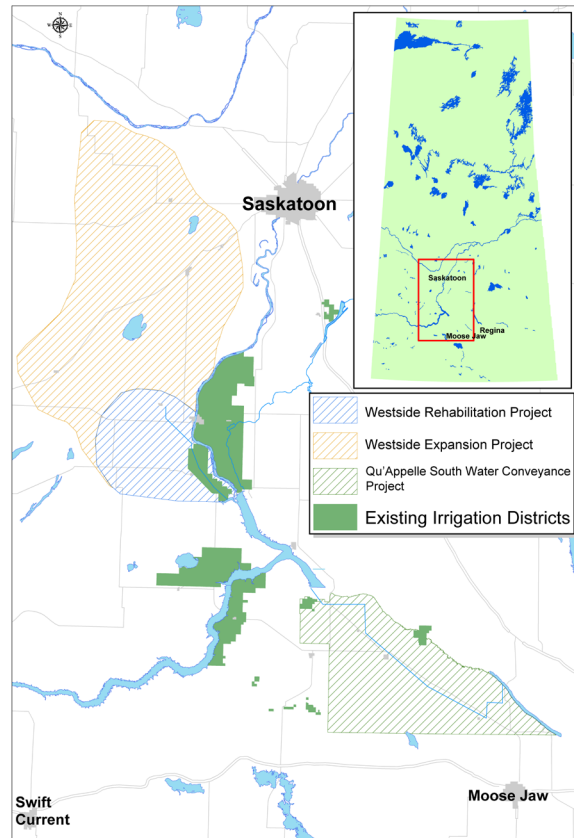
Lake Diefenbaker Irrigation Projects

Saskatchewan is positioned to add further value to our agriculture sector by using our resources to build the infrastructure needed for large-scale irrigation production. On July 2, 2020, the Government of Saskatchewan announced the Lake Diefenbaker Irrigation Expansion Project. This multi-year, multi-billion dollar project is expected to create 200,000 hectares of new irrigable land, providing Saskatchewan with the opportunity to create a sustainable and secure food supply chain.

Did you know?

In the last 10 years, more than 21,700 hectares of new irrigation have been developed in Saskatchewan.

Lake Diefenbaker Irrigation Districts



Lake Diefenbaker Existing Irrigation

57,200 hectares

Lake Diefenbaker Projects

Westside Rehabilitation Project 33,000 hectares

Westside Expansion Project 105,000 hectares

Qu'Appelle South Water Conveyance Project 49,000 hectares



MEAT AND LIVESTOCK

With vast tracts of natural pasture, endless fields of forages and grains and a vibrant research community, Saskatchewan is among the best locations in Canada for livestock production. For generations, Saskatchewan livestock producers have been excellent stewards of the land, using practices that sustain the health and productivity of grasslands, improve water quality and provide wildlife habitat. The Saskatchewan livestock industry offers a world-class commitment to animal welfare, adherence to best practices, advanced standards for meat processing and strict food safety regulations. Leading-edge research centres, including the Livestock and Forage Centre of Excellence at the University of Saskatchewan, and the Prairie Swine Centre support important advances for our livestock industry. Every year we're proud to welcome visitors from around the globe to Canadian Western Agribition, which is a world-class livestock show.

International Export Destinations*

99%

of live cattle to
United States

86%

of live hogs to
United States

11%

of live hogs
to Vietnam

2%

of live hogs
to Russia

* The majority of cattle and hogs produced in Saskatchewan are processed in a neighboring province. Saskatchewan is a significant contributor to Canadian pork and beef exports.

saskatchewan.ca/agriculture

Did you know?

There is approximately the same amount of beef cows in Saskatchewan as people.

By The Numbers

- 1.9 million hectares (4.8 million acres) of forage land.
- 4.7 million hectares (11.5 million acres) of rangeland.
- 5.9 million hectares (14.7 million acres) of fresh water.

Cattle

Saskatchewan is one of the largest beef producing provinces in Canada.

- In 2022, Saskatchewan exported \$229 million worth of live cattle.
- Saskatchewan is also a world-class provider of beef genetics.
- More than 12,700 farms with 1.1 million beef cows.

Hogs

Saskatchewan's hog sector is export-driven, with the majority of hogs and pork produced in the province destined for export markets. Saskatchewan processes approximately 330,000 hogs per year and is home to:

- Seventy-eight hog producers who sell more than 2.3 million hogs annually.
- World-class hog genetic companies.
- One of the lowest animal densities in the world.

Bison

- Saskatchewan is home to over one-third of Canada's bison herd.
- Saskatchewan is the second largest producer of bison in Canada, with 52,860 head.
- In 2022, Saskatchewan exported \$41 million worth of live bison to the United States.



Dairy

Two of the world's most efficient producing dairy cows originated in Saskatchewan. Glenridge Citation Roxy EX-97 is nationally known as "Queen of the Breed." Lorne Loveridge of Grenfell, Sask. was the breeder of "Roxy" born April 15, 1968. She is still one of the most talked about cows in history as she was a game changer for genetics of the purebred breed.

RF Goldwyn Hailey EX-97 was born April 17, 2006. In 2014, "Hailey" won the two most prestigious dairy competitions in the world, the Royal Winter Fair in Toronto and World Dairy Expo in Madison, Wis. She was bred by R&F Livestock from Warman, Sask.

Did you know?

- Saskatchewan has 165 dairy farms and shipped almost 290,000,000 litres of milk in 2022.
- We are also home to over 31,000 dairy cows and 10,800 dairy heifers.

Sheep, Lamb and Goats

- Saskatchewan has 801 farms with more than 106,000 head of sheep and lambs. We are also home to 11,800 goats on 444 farms.
- There are tremendous opportunities for growth in Saskatchewan for sheep and goat production. Goats can be raised for milk or meat, while sheep is raised for meat and wool.

Did you know?

In Saskatchewan, sheep and goats are valuable as nature's weed eaters. They help to control harmful and invasive weeds by grazing land that is overtaken by these hard-to-control weeds.

Environment

Saskatchewan's large expanse of land allows for low animal densities and high biosecurity protocols.

Our soils and topography naturally help limit environmental risk. We grow more feed grains than we need for our domestic market, which keeps feed costs lower than other areas. Climatic conditions also improve overall herd health by keeping disease and pest rates low.

Did you know?

Saskatchewan has improved our feeding systems and beef production to be more environmentally friendly by reducing carbon emissions by 18 per cent and spending nine per cent less on fossil fuels.

Saskatchewan Industry Organizations

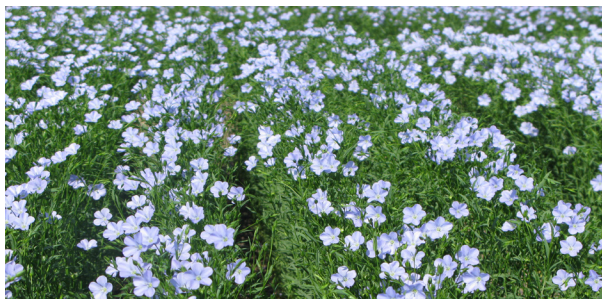
- Saskatchewan Cattlemen's Association www.saskbeef.com
- Saskatchewan Stock Growers Association www.skstockgrowers.com
- Saskatchewan Cattle Feeders Association www.saskcattle.com
- Sask Pork www.saskpork.com
- Saskatchewan Bison Association www.canadianbison.ca/producers/regional-associations/saskatchewan
- Saskatchewan Sheep Development Board www.sksheep.com
- Saskatchewan Sheep Breeders' Association www.sasksheepbreeders.com
- Saskatchewan Goat Breeders Association www.saskgoatbreeders.com

OILSEEDS

Canola and flax drive Saskatchewan's oilseeds production and account for 40 per cent of the province's agri-food exports. From heart-healthy oils and nutraceuticals to animal feed and biofuels, canola is the second-largest crop by area grown in Saskatchewan.

Canola

- Canola oil is used as cooking oil, biofuels and other emerging industrial applications, such as plastic, protein isolates, adhesives and sealants. Canola meal is also used in animal feed and aquaculture.
- Canola oil has numerous dietary benefits because of its low saturated fat content. It is a source of Omega-3 and Omega-6 fats which contribute to healthy cognitive function and reduce the risk of heart attack and stroke.
- Canola oil provides a heart-healthy oil alternative to trans-fats banned in the restaurant sector.
- Canola oil is a good option as a renewable biofuel that contributes to reducing carbon monoxide and sulphur dioxide emissions in the atmosphere.



Flax

- Flaxseed and flax oil are used as a food ingredient (bread mixes and cereals), in nutraceuticals, and various industrial uses (paint, linoleum and paper).
- Flaxseed oil has an excellent nutritional profile, with a high Omega-3 content.
- Flaxseed meal is routinely used in laying hen diets to produce Omega-3 rich eggs for consumers.
- The demand for flax in breads, bagels and other baked goods has tripled over the past 10 years.





Did you know?

In 2022, Saskatchewan was the world's leading exporter of canola seed, oil and meal.

Canola Products

- 2022 canola seed exports \$2.7 billion
- 2022 canola oil exports \$3.5 billion
- 2022 canola meal exports \$907 million

Export Destinations

Five-year average canola seed exports

- China \$971 million
- Japan \$719 million
- Mexico \$449 million
- United Arab Emirates \$207 million
- France \$196 million
- Pakistan \$176 million

Five-year average canola oil exports

- United States \$1.6 billion
- China \$339 million
- Chile \$100 million
- Mexico \$96 million
- South Korea \$90 million

Five-year average canola meal exports

- United States \$483 million
- China \$310 million
- Mexico \$3 million
- United Kingdom \$3 million
- Thailand \$3 million

Flax

2022 flaxseed exports: \$187 million

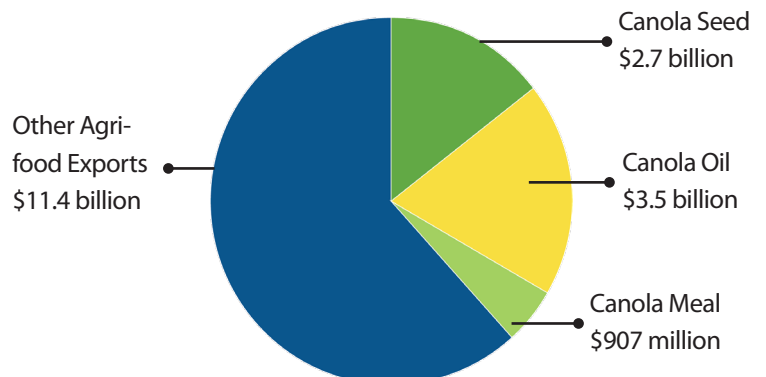
Five-year average flaxseed exports

- United States \$100 million
- China \$83 million
- Belgium \$37 million
- Japan \$3 million
- Mexico \$3 million
- Peru \$2 million

Did you know?

Flax is recognized as a foundation crop of modern civilization. It was one of the first domesticated plants and its origins date back to use in ancient Egypt.

Total Saskatchewan Agri-Food Exports





Did you know?

Canola oil is excellent for cooking due to its high smoke point and neutral flavour.

Production

Canola

In 2022, Saskatchewan produced 9.5 million metric tonnes of canola seed, making it the second-largest crop in the province. Canola is recognized as a healthy vegetable oil around the world. The byproduct, canola meal, is known as a high-value ingredient and as a protein source for dairy cattle and livestock feed. In a summary of 24 research trials, canola meal was found to increase milk production by one kilogram/day when compared to diets containing cottonseed meal or soybean meal (source: Canola Council of Canada). The demand for these products is driving growth in the oilseed market.

With four commercial scale canola crush operations in the province, Saskatchewan represents close to one half of Canada's production of canola oil and canola meal. Plans to construct additional canola processing

facilities in Saskatchewan have been announced, which will significantly increase the province's canola crush capacity.

Flax

Saskatchewan flax growers produce some of the highest quality flax in the world. In 2022, Saskatchewan produced 347,727 metric tonnes of flaxseed, accounting for 73 per cent of Canada's total production.

Saskatchewan flax growers can supply brown and golden flaxseed. Saskatchewan flax quality and safety is a perfect fit for use as a food or feed ingredient with its high oil content and alpha-linolenic acid. Saskatchewan processes whole and ground flaxseed, flax oil and flax meal.

Canada is a long-term supplier to global markets that demand reliability and expect a premium product.

Key Facts*

Saskatchewan Stats	Flaxseed	Canola seed	Canola oil	Canola meal
Saskatchewan production (as percentage of total Canadian production)	73%	52%	**	**
Saskatchewan exports (as percentage of total Canadian exports)	82%	48%	55%	36%
Saskatchewan exports (as percentage of global exports)	14%	12%	23%	19%

*2022 data

** Saskatchewan represents close to one half of production



Saskatchewan Industry Organizations

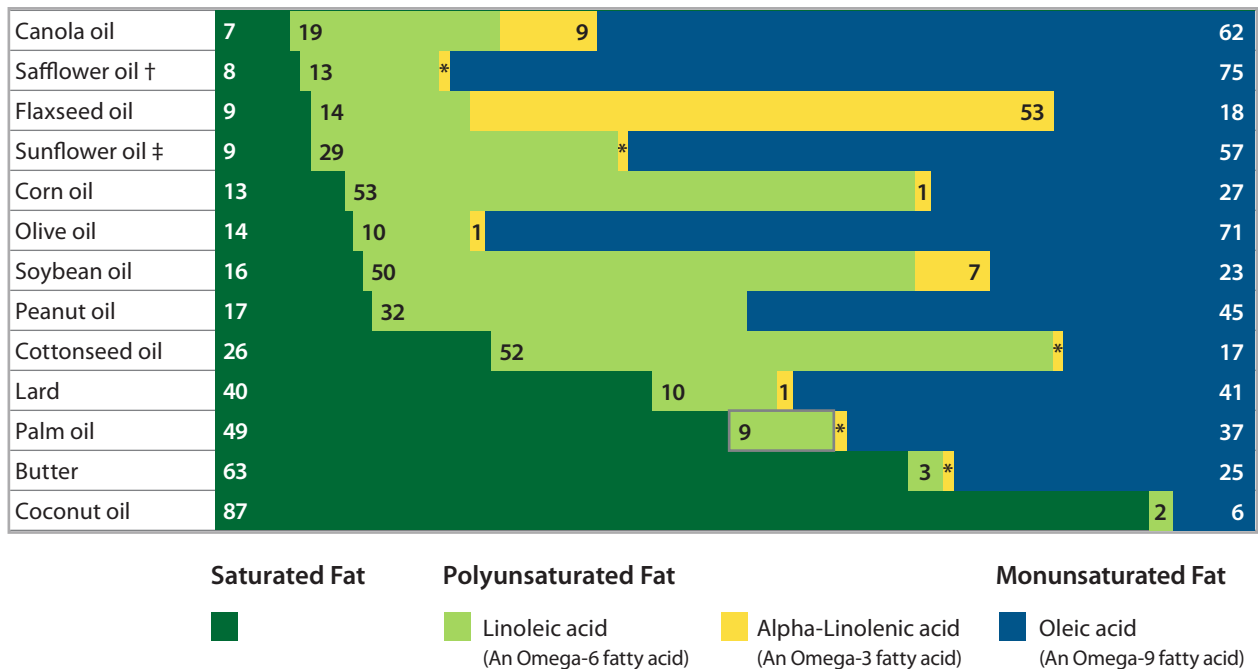
Saskatchewan Canola Development Commission
www.saskcanola.com

Saskatchewan Flax Development Commission
www.saskflax.com

Did you know?

Canola products (seed, meal and oil) account for 40 per cent of Saskatchewan agri-food exports to the world.

Comparison of Dietary Fats – Good vs. Bad Fats*



*Sourced from the Canola Council of Canada

PULSES

Saskatchewan is the leading Canadian province in the production and research of pulses, including lentils, dry peas and chickpeas. Saskatchewan is well positioned to meet the demands of global food trends that align with pulse consumption, including increased demand for protein and for foods with a reduced carbon footprint.

Long, sunny days and fertile soil lay the groundwork for high-yielding, top-quality lentil and dry pea crops. Cold, dry winters protect pulses from insects as fewer survive in these conditions. They also reduce storage quality concerns for farm-stored pulses.

Pulses contribute to a sustainable food system. They require little to no nitrogen fertilizer since they can biologically fix nitrogen from the air. In fact, they use half of the non-renewable energy sources of other crops.

Saskatchewan has earned a strong global reputation in the field of pulses. Pulse production in Saskatchewan centres on dry peas (green and yellow), green lentils, red lentils and chickpeas. We also grow other types of lentils, such as french greens and spanish browns. Saskatchewan researchers are global leaders in developing new varieties of dry peas, lentils and chickpeas. Virtually all the varieties grown in Saskatchewan were developed in Saskatchewan.

Did you know?

In 2022, Saskatchewan was the world's leading exporter of lentils and dry peas.

saskatchewan.ca/agriculture



Red lentils



Green lentils

Pulses are prepared and consumed in a variety of ways – whole, split, ground into flour or separated into protein, fibre and starch components. Pulses provide an important protein source to foods, such as soups and stir-fries. Dry peas are popular around the world as a food processing ingredient and an excellent product for animal feed. Saskatchewan is also a leader in protein fractionation and extrusion technology related to pulses.



Did you know?

Food companies boost the nutritional content of many foods, such as flours, pastas and baked goods by adding pulse ingredients.

The health benefits of pulses are beginning to attract consumer and food industry attention world-wide. Rich in fibre, protein and minerals and also low in fat, pulses are a cost-effective food and ingredient choice around the world. Yellow peas are in high demand. Asia is a huge market for yellow pea exports as it is often used in pea flour, pea dahl, noodles and as a feed ingredient. Pulses are also in demand for their ability to provide a plant-based protein (ideal for vegetarians) and for being gluten-free. Ongoing research shows lentils are well-suited for those managing diabetes as they help manage blood glucose levels.



Chickpeas



Green field peas



Yellow peas

Production

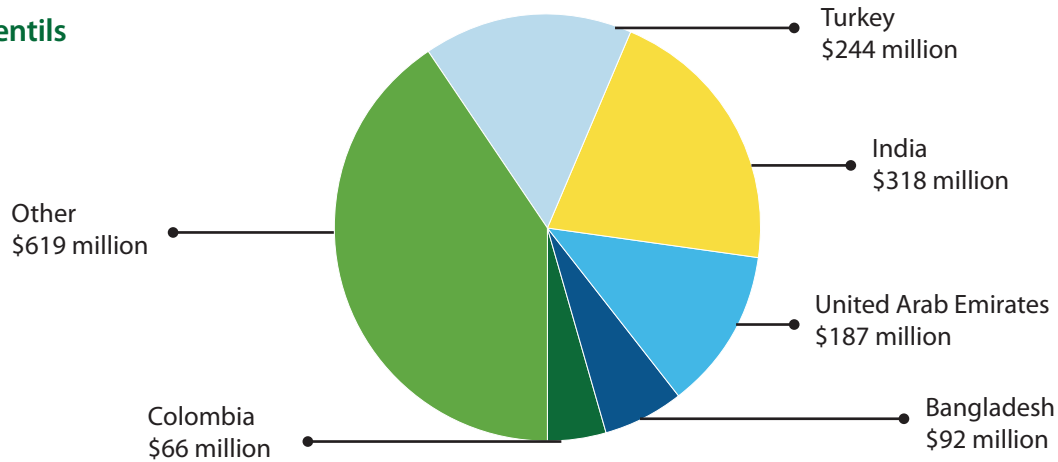
- Commercial lentil production began in the 1970s in Saskatchewan.
- Saskatchewan produces 88 per cent of Canada's chickpeas, and 85 percent of Canada's lentils
- Saskatchewan is also the world's largest producer of dry peas.
- Kabuli is the predominant chickpea grown in the province.
- Yellow peas are the primary pea crop grown in Saskatchewan.
- On average over the last five years, red lentils comprised 74 per cent of total lentil production.

In 2022 Saskatchewan Exported:

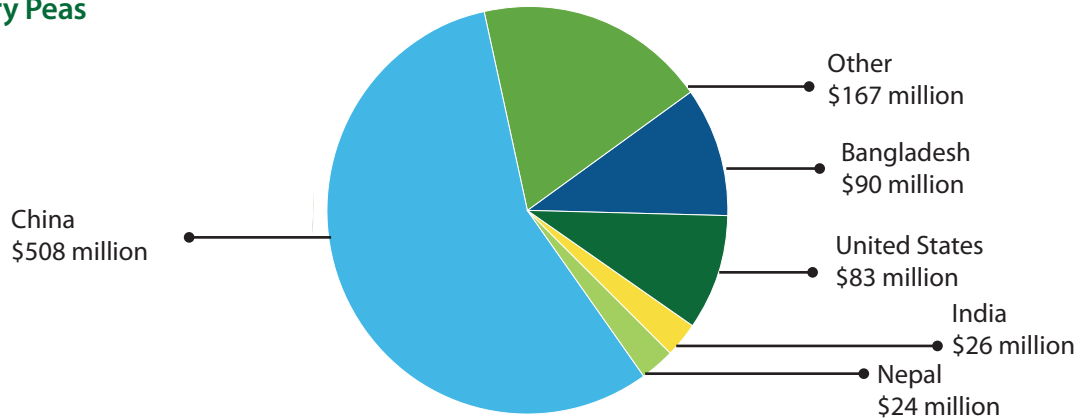
- \$2.0 billion in lentils;
- \$1.1 billion in dry peas; and,
- \$250 million in chickpeas.

Five-Year Average Annual Exports of Lentils, Dry Peas and Chickpeas (2018-2022)

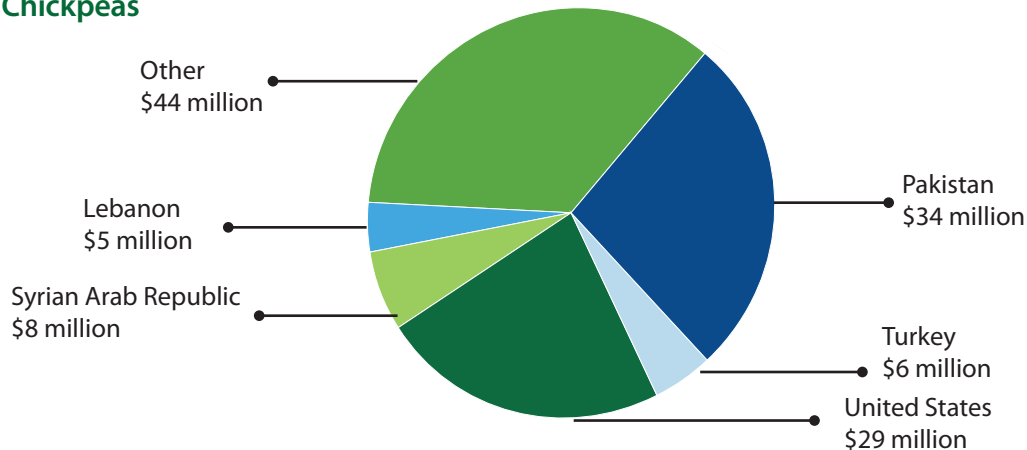
Lentils



Dry Peas



Chickpeas





Key Facts*

Saskatchewan Stats	Lentils	Dry Peas	Chickpeas
Saskatchewan production (as per cent of total Canadian production)	85%	46%	88%
Saskatchewan exports (as per cent of total Canadian exports)	92%	78%	96%
Saskatchewan exports (as per cent of global exports)	45%	37%	14%

*2021 data

Top Pulse Export Destinations*

China	\$515 million
India	\$347 million
Turkey	\$253 million
United Arab Emirates	\$204 million
Bangladesh	\$182 million
United States	\$174 million
Pakistan	\$99 million
Colombia	\$83 million
Algeria	\$63 million
Peru	\$50 million

* Based on five-year average

Saskatchewan Industry Organization

Saskatchewan Pulse Growers
www.saskpulse.com



Did you know?

Saskatchewan is India's top supplier of lentils and China's top supplier of dry peas.

RESEARCH AND DEVELOPMENT

Farming was underway long before Saskatchewan became a province. Indigenous producers were growing crops, testing new varieties and using farming techniques in the late 19th century. Early producers recognized the area's ideal climate and land base for crop and livestock production. Today, these core strengths are bolstered by world-class research facilities and researchers that are supported by a consistent regulatory framework. Biological science developments for plants and animals have supported the development of new medicines, seeds and biodegradable plastic.

Saskatchewan's Innovation Place, with facilities in Saskatoon, Regina and Prince Albert, is one of North America's most advanced research parks. They provide commercial facilities and services to the pharmaceutical, environmental and agricultural industries. The University of Saskatchewan is a world leader in both agricultural crop and livestock research and home to one of Canada's largest clusters of research organizations.

Global Institute for Food Security

The Global Institute for Food Security (GIFS) is developing Saskatchewan-led solutions to feed a growing world population.

GIFS is a unique \$52 million public-private partnership that is designed to develop transformative technologies for both developed and developing countries to help prepare the world for a sustainable future.

GIFS works with partners to discover, develop and deliver innovative solutions for the production of globally sustainable food. The organization focuses on improving genetic potential of seeds, improving soil quality and fertility and improving digital agriculture information and communication technology.

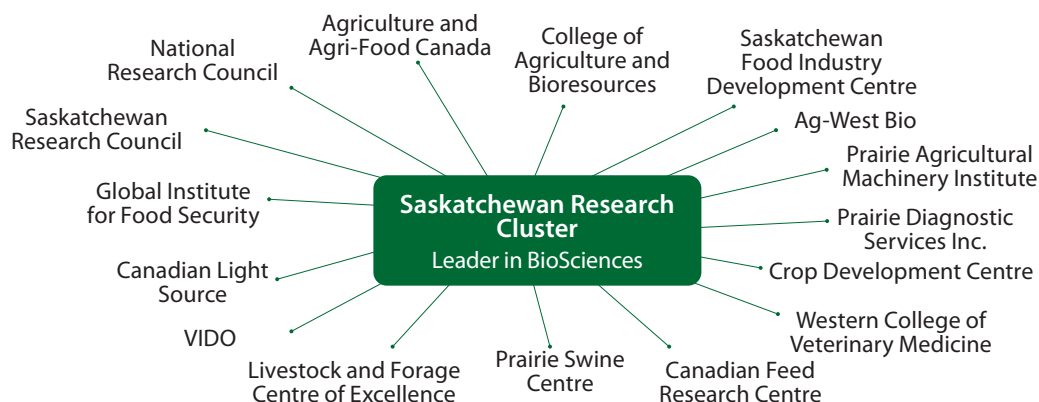
www.gifs.ca

Ag-West Bio

Ag-West Bio is a not-for-profit, membership-based company that works to support the commercialization of bioscience technologies in the areas of sustainable crop production, food processing, health, environment, biofuels and bioproducts.

Ag-West Bio provides services to entrepreneurs to commercialize their innovations and to create sound business plans.

www.agwest.sk.ca



Did you know?

Saskatchewan is a leader in agriculture research and development. Our expertise covers crop research, ingredients, biofuels, bioproducts, nutrition and health and wellness.

Prairie Agricultural Machinery Institute

An applied research, development and testing organization, the Prairie Agricultural Machinery Institute (PAMI) serves food processors, manufacturers and farmers by providing resources to compete in domestic and international markets.

With a strong history of independent, third-party farm equipment evaluation and development, PAMI has spurred technological advances in all areas of traditional farming practices.

PAMI is ISO 9001:2015 registered.

www.pami.ca

Crop Development Centre

The Crop Development Centre (CDC) conducts field crop breeding as well as basic and applied crop research and development at the University of Saskatchewan.

The CDC is focused on improving existing crops, creating new uses for traditional crops and developing new crops. Over the last four decades, the CDC created more than 500 new commercial crop varieties of over 40 different crop types.

www.agbio.usask.ca/research/centres-and-facilities

Western College of Veterinary Medicine

The Western College of Veterinary Medicine is the premier centre of veterinary education, research and expertise in Western Canada and a key member of Canada's veterinary, public health and food safety network. The College includes a veterinary medical centre, a provincial diagnostic laboratory and large-scale research facilities.

www.usask.ca/wcvm



Prairie Diagnostics Services Inc.

Prairie Diagnostic Services Inc. (PDS) is a non-profit laboratory created by the Government of Saskatchewan and the University of Saskatchewan. Located at the Western College of Veterinary Medicine in Saskatoon, PDS offers diagnostic services for both companion and food animals, including necropsy, surgical pathology, clinical pathology, histology, bacteriology, immunology, molecular diagnostics, virology, toxicology and endocrinology.

www.pdsinc.ca

Canadian Feed Research Centre

The Canadian Feed Research Centre (CFRC) is a research feedmill owned by the University of Saskatchewan, located in the city of North Battleford, Saskatchewan. The CFRC is a national feeds research centre that researches, develops and commercializes new and better high-value animal feeds from low-value crops. It also develops and commercializes co-products from bioprocessing and biofuels industries and novel feed additives. This world-class facility is unique in offering a broad range of research scale capability, from laboratory to pilot plant to larger industrial scale research – a major advantage in attracting commercialization activities and engaging industry.

www.agbio.usask.ca/research/centres-and-facilities

Prairie Swine Centre

Prairie Swine Centre is a non-profit research facility that develops practical swine production technology for the public and private sectors.

www.prairieswine.com

Did you know?

Saskatchewan yellow pea research has increased demand for pea ingredients used in a variety of products from protein bars to noodles, and a wide range of other consumer goods. This research has helped grow yellow pea exports to China from \$0 in 2012 to \$579 million in 2022.



Did you know?

Researchers at VIDO are developing vaccines against emerging disease including COVID-19, African swine fever and tuberculosis. This includes eight commercialized animal vaccines developed, with six world firsts.

Canadian Light Source

The Canadian Light Source (CLS) is a national research facility and leading centre in synchrotron science, performing synchrotron light research with the capacity to view structural modification in biological materials to the atomic level. They work with the scientific community to promote the use of synchrotron light, create industrial partnerships and innovation and engage in scientific and educational outreach.

More than 1,000 academics, government and industry scientists from around the world use the CLS for innovative health, agriculture, environment and advanced materials research.

www.lightsource.ca

Saskatchewan Food Industry Development Centre

The Saskatchewan Food Industry Development Centre Inc. (Food Centre) is a non-profit organization that provides expertise and resources to assist agri-businesses in bringing food innovations to commercialization for domestic and/or international markets. The Food Centre has capacities in unique food process development, interim processing and incubation, pulse innovation, extrusion, food safety training and path-finding. The Food Centre's two processing facilities are Canadian Food Inspection Agency and Hazard Analysis Critical Control Point recognized and are equipped with innovative technologies to manufacture a variety of food products. The Food Centre is instrumental in helping numerous agri-businesses develop and showcase food products using ingredients derived from Saskatchewan-grown commodities. The expansion of the Food Centre with the construction of the new facility, the Agri-Food Innovation Centre in Saskatoon, strengthens the Food Centre's current expertise.

www.foodcentre.sk.ca

The Livestock and Forage Centre of Excellence

The Livestock and Forage Centre of Excellence (LFCE) brings together all aspects of beef cattle research and knowledge transfer, providing researchers, faculty, students, industry and producers with a broad-based platform for research, teaching and extension activities. The LFCE includes livestock facilities, forage production and grazing land near Saskatoon. The centre's work focuses on the following key areas:

- Cow-calf production;
- Beef cattle production;
- Forage breeding and production;
- Grazing and pasture management; and
- Bison reproduction, herd management, disease control and nutrition.

www.lfce.usask.ca

Vaccine and Infectious Disease Organization

The Vaccine and Infectious Disease Organization (VIDO) is a national research facility and leader in infectious disease research and vaccine development. VIDO is home to the International Vaccine Centre, one of the largest and most advanced containment level three facilities in the world. The organization is also constructing a pilot scale manufacturing facility to good manufacturing practice standards in its containment level three – this will be one of the only facilities of its kind internationally.

VIDO works with partners from around the world to enable new technology development to help ensure humans and animals are protected from emerging infectious diseases.

www.vido.org

Saskatchewan Research Council

The Saskatchewan Research Council is one of Canada's leading providers of applied research, development and the transfer of innovative scientific and technological solutions, applications and services. They provide a range of services to support a sustainable agriculture industry in Canada including:

- Agriculture products testing;
- DNA testing services;
- Custom DNA analytics;
- Custom lab equipment & instrumentation;
- Microbial fermentation services;
- Climate services;
- Bioprocessing; and
- Carbon accounting, life cycle assessments and environmental impact management.

www.src.sk.ca

National Research Council

The National Research Council (NRC) conducts research and provides sophisticated, affordable research facilities to biotech start-up companies. The NRC is a world leader in genetic engineering. NRC's mission is to perform, assist and promote strategic research in plant biotechnology to improve and diversify the Canadian industry and strengthen Canada's competitive position in the global economy.

Their research areas include: carbohydrate modification, cell technologies, gene expression, biotechnology, plant growth regulation, molecular pathology, promoter/gene discovery technology and seed adaption modifications.

www.nrc.canada.ca



Did you know?

The Government of Saskatchewan invests approximately \$35 million annually in agriculture research within the province to help our industry grow.

Agriculture and Agri-Food Canada

Saskatoon Research Centre

The Research Centre is located on the campus of the University of Saskatchewan and conducts research on prairie crops to support the agri-food industry in Western Canada.

Their research focuses on integrated crop management for sustainable cropping systems, integrated strategies for genetic improvement of oilseed, legume and forage crops, genetic resource conservation, characterization and utilization and bioproducts and bioresources. The Centre is also home of the Plant Gene Resources of Canada, an important international repository of crops.

Semi-Arid Prairie Agricultural Research Centre

The Research Centre was established in 1920 in Swift Current and conducts major agricultural research on the dryland regions in Canada's prairie.

The Centre aims to address severe drought, erosion, frost, pests and crop disease and provide support to the expanding settlements in the region characterized by a semi-arid climate.

www.agr.gc.ca

College of Agriculture and Bioresources

A world-class, interdisciplinary applied sciences college specializing in three primary scientific and social domains:

- Sustainable production systems;
- Safe food supply and bioproducts; and
- Environment, ecology and community.

It's also home to the Rayner Dairy Research and Teaching Facility. This state-of-the-art facility offers unparalleled opportunities for researchers to create new knowledge that will help Canadian agricultural producers stay competitive, as well as providing a superior learning environment for its students and the visiting public.

www.agbio.usask.ca

SPECIALTY AGRICULTURE

Specialty Crops

Saskatchewan is a world-leading producer and exporter of many specialty crops, including mustard seed, canary seed and herbs and spices. Our ideal growing conditions and environment have allowed the province's agriculture industry to diversify to meet increasing global demand for these products.

Canary Seed

Grown for bird seed and specialty bread, Saskatchewan dominates canary seed production domestically and around the world. In 2022, we produced 90 per cent of Canada's canary seed, accounting for 56 per cent of global exports. We export canary seed to more than 50 different countries.

Research is underway to uncover new markets for this crop, including the baking, pet food and livestock feed industries. In 2016, Health Canada and the United States Department of Agriculture approved dehulled, glabrous canary seed as a safe food for human consumption. Canary seed has a nutty flavour and can be used whole, as flours or flakes, and can even be extruded for snack foods.



saskatchewan.ca/agriculture

Did you know?

In 2022, Saskatchewan was the world's:

- Leading exporter of canary seed, accounting for 56 per cent of the world's canary seed exports; and,
- Largest exporter of mustard seed, accounting for 24 per cent of the world's mustard seed exports.

Mustard

A popular condiment and key ingredient in salad dressings and mayonnaise, mustard has numerous essential minerals including calcium, iron, zinc and magnesium.

Saskatchewan's hot and dry growing conditions in the Southwest produce mustard crops of renowned quality. In 2022, Saskatchewan mustard production accounted for 71 per cent of Canada's annual production. The province is responsible for 24 per cent of the world's mustard exports, exporting to 39 different countries around the world. Saskatchewan produces yellow, brown and oriental mustard seed.

- Yellow seed is used mostly in North America for yellow mustard and salad dressings.
- Brown seed is used in Europe as a condiment and in Dijon and hot mustards.
- Oriental seed is often used to make spicy cooking oils.



Did you know?

Beef cattle accounts for most of Saskatchewan's organic livestock production. There are about 24 certified organic livestock operations throughout the province.

Organics

As the demand for organic products gains momentum, Saskatchewan is stepping up to meet the global demand for organic grains, oilseeds, pulses and livestock. Almost one third of Canada's certified organic land is located in Saskatchewan. Almost 16 per cent of Canada's certified primary organic producers (938 farms) call Saskatchewan home.

Organic farms in Saskatchewan primarily produce cereals, oilseeds, and pulse crops, and account for almost 60 per cent of Canadian organic grain exports in 2022. Organic wheat is the province's most popular export, along with oats, flax, barley, lentils and peas.

Organic livestock operations hold significant potential in Saskatchewan, where rangeland provides the perfect environment for producing high-quality, organically raised meat.

Organic farmers do not use chemical fertilizers, synthetic pesticides, irradiation processing or genetically engineered plants. Organic products are independently certified to the Canadian Organic Standards, which helps Saskatchewan capture a larger share of this rapidly expanding global market. This sector is further supported by 110 certified organic processors, handlers, manufacturers and retailers in the province.

Herbs and Spices

- Spices grown on a field scale include coriander, caraway and fenugreek.
- Natural health products grown and processed in Saskatchewan include borage and sea buckthorn.
- Wild products collected and processed include wild rice, mushrooms, chaga, Labrador tea and a variety of berries and forest products.



Wild rice

- Medicinal herbs grown include hemp (CBD), echinacea, red clover and dandelion.
- The range of culinary herbs grown is vast including basil, rosemary, oregano and garlic. and many more in low quantities.
- Growers/collectors/processors may participate in the voluntary Good Agriculture and Collection Practices Program to ensure food safety and improve food traceability.

Forage

Alfalfa seed production is a well-established industry in Saskatchewan. Success in alfalfa seed production requires a blend of conventional agronomic production practices and innovative crop pollination management skills.

Alfalfa seed is grown on about 16,825 acres in Saskatchewan and accounts for approximately 35 per cent of Canadian alfalfa seed production.

Most Saskatchewan alfalfa seed production is carried out in dryland conditions. Despite low prices for seed over the past few years, alfalfa seed continues to be one of Canada's most valued grass/legume seed crops.

The majority of alfalfa seed produced in Saskatchewan is exported to the United States and China, with smaller amounts shipped to many other countries around the world.



Honey

Saskatchewan is one of Canada's leading premium honey exporters and ships product mainly to the United States, Japan, and China.

The province's commercial beekeeping industry consists of approximately 120 commercial beekeepers and 102,000 colonies. Long, warm summer days help colonies produce large amounts of white honey that is used for table honey or blending with stronger flavoured honeys. Each colony produces, on average, approximately 180 pounds of honey every year. This is the highest per colony production average in Canada.

Potatoes

Potatoes are a cool season crop and do well in Saskatchewan's growing season. Saskatchewan's long, sunny days and cool nights provide locally grown seed potatoes with what is referred to as Northern Vigor*. Saskatchewan's seed potatoes exhibit increased plant vigour and produce higher yields than seed from more southerly regions.

**Northern Vigor is a trademark of the Saskatchewan Seed Potato Growers Association*

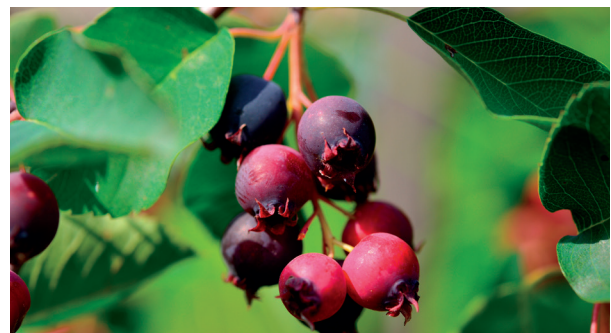
Did you know?

Saskatchewan has never tested positive for potato cyst nematodes.

Other Specialty Crops

Several Saskatchewan specialty crops are gathering increased culinary interest.

- Specialty ancient grains – triticale, kamut, spelt and quinoa for specialty breads and niche markets.
- Saskatoon berries – antioxidant-rich, super berries for use in supplements, drinks, cereals and other foods.
- Prairie sour cherries – very hardy fruit, an excellent source of vitamins and antioxidants, can be used in vitamin, health, alcoholic and energy drinks, as well as cereals and yogurt.
- Haskap berries – have a sweet, tangy flavour that some people say is a cross between blueberry, raspberry and black currant. The fruit is high in vitamins C and A, fibre and potassium.



Saskatoon berries



Did you know?

Saskatchewan is home to almost 7,000 farmed elk and deer.

Specialty Livestock

Specialization in elk and deer (cervid) production has been evolving since the 1970s. The initial focus on breeding stock and velvet production has evolved into a broader meat/antler/trophy stock production system.



Potatoes

Saskatchewan Industry Organizations

- Saskatchewan Mustard Development Commission
www.saskmustard.ca
- Canary Seed Development Commission of Saskatchewan
www.canaryseed.ca
- Sask Organics
www.saskorganic.com
- Saskatchewan Fruit Growers Association
www.saskfruit.ca
- Herb, Spice and Specialty Agriculture Association
www.saskherbspice.org
- Saskatchewan Seed Potato Growers Association
www.sspga.ca
- Sask Leafcutters Association
www.saspa.com
- Canadian Cervid Alliance
www.canadiancervid.com

SUSTAINABILITY

Producers in Saskatchewan are the pioneers of agricultural sustainability. For generations, producers have been developing and using sustainable practices on their farms and ranches.

This is built on a decades-long focus on soil health, diversified crop rotations, innovative technology and investments in research. In pastures, Saskatchewan ranchers use rotational grazing, making use of marginal land and improving pasture health by enabling vulnerable plants to regrow and recover.

Carbon Sequestration

Our province was one of the first to adopt the practice of no-till farming in the 1980s. Today, 95 per cent of the land seeded to annual crops is done using zero or minimum tillage, the highest percentage of any province in Canada. Saskatchewan also manufactures zero till seeding equipment, exporting this technology to approximately 30 countries globally.

These farming practices minimize soil disruption, enhance soil organic content, optimize water and nutrient use, and sequester carbon dioxide. As reported in the 2023 National Inventory report, on average, Saskatchewan producers sequester approximately 15.6 million tonnes of carbon annually, which is almost 95 per cent of the total reported agriculture emissions in the province.

Recent research indicates that Saskatchewan crop production is among the most sustainable in the world. A study by the Global Institute for Food Security found Saskatchewan's net carbon footprint for canola and

Did you know?

The amount of carbon sequestered by Saskatchewan producers is equivalent to taking 3.4 million cars off the road annually.

non-durum wheat production is more than 60 per cent lower than competitive jurisdictions. For dry field peas, Saskatchewan's net carbon footprint is 95 per cent lower.

In addition to 15.4 million hectares of crop land (2019-2023 average), Saskatchewan has about 7.9 million hectares of native grasslands and tame forages for livestock production making up one-third of Canada's grassland. This land is sustainably maintained by ranchers and farmers, and it is estimated that native prairie (roughly 4.67 million hectares in 2021) is storing between 22 and 86 tonnes of carbon per acre.



Introducing New Practices

Saskatchewan producers are consistently using innovative technologies to produce higher yields more efficiently, such as modern equipment, global positioning system guidance tools, drone technology and slow-release fertilizers.

The adopting of 4R Nutrient Stewardship, incorporating the right fertilizer source at the right rate at the right time and in the right place, ensures producers in the province are using nutrients as effectively as possible while minimizing emissions.

Increasing the presence of pulses on the province's cropland also reduces the requirement for fertilizers. Through this practice, Saskatchewan has reduced about 2.1 million tonnes of greenhouse gas emissions.

Did you know?

Saskatchewan is home to more than 40 per cent of Canada's total crop land, and on average, produces about 35 million metric tonnes of grains, oilseeds and pulses per year.

Did you know?

With Saskatchewan's carbon sequestration as reported in the National Inventory Report and the carbon sequestered in our grasslands, it is believed agricultural emissions from cropping, livestock and on-farm fuel is already net-zero in the province.

Saskatchewan is continually investing in new technologies, and that support has helped producers move away from traditional tillage to control weeds. Innovative crop protection products play an integral role in addressing the management of various insects, weeds, and pathogens to protect the health of the landscape.

Saskatchewan agricultural production has increased significantly over the last three decades and, at the same time, soil organic carbon has increased due to our direct seeding and continuous cropping systems.

The province places an emphasis on innovation in the agriculture sector investing more than \$35 million annually in agricultural research, further advancing the Saskatchewan's sustainability story.

To learn more about how Saskatchewan is a leader in sustainability, visit sustainablesk.ca

