



Canada's

Agriculture, Food and Beverage INDUSTRY

Canada's Pulse Industry

Pulses are dry seeds of legumes that are used as food or feed. They include peas, beans, lentils and chickpeas. Pulses are excellent sources of proteins, vitamins, minerals and other nutrients while being low in fat, gluten-free and high in fibre. Pulses were first cultivated in the Middle East and Central and South America, but their nutritious qualities and taste have led to their extensive use around the world. There is now a renewed interest in pulses in both developed and developing countries.



Canada is a large producer and exporter of pulses. It can grow high quality pulses at competitive costs because the climate is favourable and farmers alternate high scale production of pulses with that of cereals. In fact, Canadian farmers can grow more pulses relative to cereal yields than almost any country in the world. Canada's cool climate provides pulse crops with natural protection against insects and disease.

Over the last decade, pulse seeded area in Canada has increased 82%, with production peaking in 2005 at 4.8 million tonnes. In

2007, production of pulses stood at 4 million tonnes with farm cash receipts valued at over \$1 billion. Pulse production is made up of dry peas, lentils, chickpeas and dry beans.

Production of dry peas reached 2.9 million tonnes in 2007-2008 and accounts for about 70% of total pulse production in Canada. Yellow peas are the most common variety produced making up 80% of the total; other varieties include green (18%), small yellow, Maple, green marrowfat and Austrian winter (total 2%).

Lentils are the second most common pulse grown in Canada with production estimated at 674 thousand tonnes in 2007-2008. Large green and red lentils are the most common varieties produced making up about 40% and 35% respectively of total lentil production. Other varieties include small green (20%), medium green, dark green speckled and brown (total 5%).

In Canada, commercial chickpea production started in 1995 at around one thousand tonnes, but has since shown remarkable growth peaking in 2001-2002 at 455 thousand tonnes. Chickpea production for 2007-2008, is estimated at 255 thousand tonnes and consists mainly of the large and small Kabuli varieties. Smaller quantities of Desi chickpeas are also grown in Canada.

Last, production of dry beans reached 277 thousand tonnes in 07-08 accounting for about 7% of total pulses grown in Canada. There are several varieties of dry beans produced in Canada with the most common being the white pea (35%), followed by pinto (20%) and black beans (8%). Other varieties also include cranberry beans, dark red, light red and white kidney, great northern, small red, pink brown, adzuki, kintoki and faba beans.



The majority of the growth in this sector over the last 15 years can be attributed to international demand. The acceptance of these Canadian products is such that, during the last four years, pulses have been exported to over 150 countries and territories. With exports valued at \$1.2 billion in 2007, Canada remains the world leader in the supply of pulses on the international market. The top destination for Canadian pulses is India which received 36% of shipments in 2007. Other destinations include Spain, Bangladesh, China, the USA and Spain.

Like production, dry peas are also the largest pulse exported accounting for 65% of shipments in 2007. These are followed by lentils (26%), dry beans (6%) and chickpeas (2%).

For dry peas, yellow peas were the most common variety exported to international markets, making up 68% of total dry pea shipments. These were followed by green (14%) and other varieties (6%). As for lentils, the green variety, including speckled, took up the largest proportion of total Canadian lentil exports in 2007 at 67%, followed by red lentils with 29%. Exports of chickpeas, on the other hand, were split about 60/40 between Kabuli and other varieties produced in Canada (mostly Desi). Exports of dry beans consist mainly of navy and white pea beans (32%), followed by pinto beans (18%) and kidney beans (15%). Other export varieties also include great northern, black, small red, adzuki and broad beans like Lima.

The dramatic increase in demand for pulses is driven by several factors:

- Populations in certain countries are growing at a pace that cannot be matched by the expansion of their own agricultural sectors.
- Globalization enables producers in some countries to reduce the cultivation of pulses for their respective local markets if they can produce more

profitable crops for exports.

- Changing weather patterns are influencing the expected agricultural output in some regions of the world.
- Health-conscious consumers in some affluent markets are increasing their consumption of vegetal protein. Pulses are the perfect fit for such a diet and are also an excellent source of vitamins, minerals and antioxidants.
- Feed grade peas are used extensively as a feed ingredient in Canada and the EU. Feed peas are expected to gain a larger share of the international ingredient market as feed formulations come under closer scrutiny due to human and livestock health concerns.

Canada has taken a leadership role in innovative research and development in the pulse sector. Ongoing research and careful crop management have contributed to the high quality of Canadian crops. Importers have noted the willingness of the Canadian pulse industry to develop and produce new varieties in Canada in order to meet the taste of the international consumer.

In the absence of international standards, Canada has taken the lead in the development of terminology, protocols and standard evaluation methods for the worldwide pulse industry. Within Canada, the Canadian Grain Commission sets quality standards for pulse crops. Its programs result in shipments that consistently meet contract specifications for quality, safety and quantity.

Canada is also pursuing policies that will allow pulse producers to better meet their business needs while remaining market-oriented and globally competitive. These policies are integrating food safety, innovation and environmental responsibility.





For More Detailed Information

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Canada's food and agricultural products reflect our dedication to excellence, and our deep commitment to safety, quality, environmental responsibility, innovation and service.

In every facet of our industry, we seek to earn the trust of our customers by answering their needs and exceeding their expectations. Those values along with our belief in building strong relationships, have given Canadian agriculture and food products an international reputation for excellence. Customers around the world know that they can trust the goodness of Canada.



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