

# **Bi-weekly Bulletin**

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# SOYBEANS: SITUATION AND OUTLOOK

Soybean prices have decreased sharply during 2004-05 under pressure from record large production in the US combined with an expected record large output in South America. The consumption of soybeans is also growing, although at a slower pace, as rising world incomes increase the demand for soybean meal and soybean oil. World carry-out stocks are forecast to rise sharply. For 2005-06, world soybean prices are expected to remain depressed and slow down the expansion of soybean area in Brazil. Canadian output is projected to drop slightly as a decline in yields more than offsets a slight rise in harvested area. Over the medium term, the world soybean sector is projected to grow as the processing industry expands in emerging-economy countries.

#### SITUATION

Soybeans make up about 70% of the world's output of the 7 major oilseeds (soybeans, cottonseed, peanut, sunflowerseed, canola/rapeseed, copra and palm kernel). The importance of soybeans in the oilseeds sector continues to grow with output expanding by one-quarter or 55 million tonnes (Mt) since 2000-01. Most of this growth in output has been due to the expansion of seeded area in South America, primarily Brazil, which continues to develop its interior regions. The area seeded to soybeans expanded sharply in Argentina also. By contrast, seeded area in the United States (US) has remained stable. The growth in output in the US has been due to increased yields from active breeding programs which resulted in the release of improved varieties.

For 2004-05, world soybean production is expected to set a record of about 219 Mt, supporting a sharp rise in world soybean supplies.

The global soybean crush is projected to rise by 6% due to increased processing in China, Brazil, the US and Argentina. The growth in global processing is being supported by higher soyoil and soymeal consumption, particularly in China, as part of the worldwide trend towards greater urbanization, higher disposable incomes and increased consumption of animal and vegetable protein.

The consumption of edible soybeans in human diets is also projected to rise. As part of the industrialization process and the growing sophistication of the global food supply chain, the processing of food-grade soybeans into edible products has been expanding, particularly in Asia. Some of these products, for example soy sauce, are then exported to the European Union (EU). Soybeans grown in North America may be shipped to Guangdong province, north of Hong Kong, processed and re-exported to Europe or North America.

The crushing of soybeans is diversifying away from its historical base in the US and

the EU into South America and Asia. This trend has been supported by financial incentives, differential tariffs and favourable regulations as part of developing countries' initiatives to increase domestic employment and economic growth. Over the past few years, this move has been supported by low interest rates and the strong US dollar. Rising ocean freight rates, the devaluation of the American dollar and a possible rise in interest rates in 2005 and beyond, which all increase costs, is expected to slow down the expansion of soybean crush plants in Asia and South America.

As a result of the sharp rise in supply

compared to usage, carry-out stocks of soybeans are expected to be burdensome for 2004-05.

## Record US Crop Burdens the World Oilseed Sector.

The United States produced a record large soybean crop in 2004-05 on support from a

Canad

Soybeans: Supply & Disposition							
	2003-04	2004-05e	2005-06f				
	million tonnes						
World (October-September)							
Carry-In Stocks	40.75	37.41	52.59				
Production	<u>188.81</u>	<u>219.23</u>	225.02				
Total Supply	229.56	256.64	277.61				
Crush	164.34	174.29	175.00				
Other	<u>27.81</u>	<u>29.25</u>	<u>30.61</u>				
Total Usage	192.15	204.05	207.61				
Carry-Out Stocks	37.41	52.59	65.00				
Trade	55.59	62.49	64.00				
United States (September-August)							
Carry-In Stocks	4.85	3.06	10.21				
Production	66.78	85.48	80.28				
Imports	<u>0.15</u>	<u>0.14</u>	<u>0.08</u>				
Total Supply	71.78	88.68	90.57				
Crush	41.63	44.91	46.13				
Other	<u>3.00</u>	<u>4.17</u>	4.03				
Total Domestic Usage	44.63	49.08	50.16				
Exports	24.09	29.39	28.85				
Carry-Out Stocks	3.06	10.21	11.56				
Canada (September-August)							
Carry-In Stocks	0.14	0.14	0.53				
Production	2.27	3.05	2.99				
Imports	<u>0.59</u>	<u>0.40</u>	<u>0.25</u>				
Total Supply	3.00	3.59	3.77				
Crushing	1.50	1.45	1.75				
Other	<u>0.45</u>	<u>0.61</u>	0.62				
Total Domestic Use	1.95	2.06	2.37				
Exports	0.91	1.00	1.00				
Carry-out Stocks	0.14	0.53	0.40				
e: USDA and AAFC April 2005 estimates							
f: USDA and AAFC April 2005 forecasts							
Source: USDA, Statistics Canada, AAFC							

1.5 million acre increase in harvested area and a record high yield of 42.5 bushels per acre. Record yields were set as a result of the cooler than normal weather during the critical pod setting period in August which reduced floral abortion, followed by the warmest weather in 100 years during September which aided in pod filling allowing plants to express their genetic potential and bringing plants to maturity. As a result, US soybean output increased by 28% from the drought reduced crop of 2003-04.

Demand for US soybeans appears to be relatively stable as crush and exports rebound to pre-2003-04 levels. Domestic crush of soybeans is expected to reach about 45 Mt on growing demand for soybean meal. US exports are expected to rebound from 2003-04 but remain around the 28 Mt recorded in 2001-02 and 2002-03. Carry-out stocks are expected to be extremely burdensome for 2004-05, tripling from the tight levels of 2003-04, and double the 2000-01 level when the benchmark US farmgate price fell to US\$4.50 a bushel.

#### **Brazil Plagued by Drought and Disease**

Brazilian soybean production is forecast at a record 54 Mt, 4% above 2003-04, as the result of hot and dry growing conditions combined with an outbreak of Asian rust. Despite the decline in output from previous forecasts, supplies are expected to remain burdensome because of the large carry-in stocks.

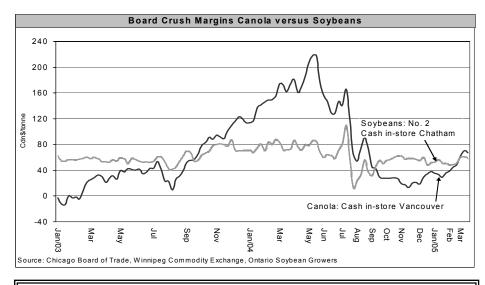
Demand for Brazilian soybeans is expected to increase moderately in 2004-05. Domestic processing of soybeans is expected to grow slightly, to about 31 Mt, largely on an expected 1.0 Mt increase in soymeal exports, to about 16 Mt. Exports of soyoil are projected to remain stable at about 2.7 Mt. Exports of soybeans are expected to grow modestly, to about 21 Mt, as pressure from higher ocean freight rates and the decline in the value of the US dollar, against the real, more than offsets support by higher supplies. Carry-out stocks are expected to rise to a record 18 Mt, vs 17 Mt for 2003-04 and the five year average of 15 Mt.

#### **Argentina Output Rises**

Argentina is the world's third largest producer of soybeans, accounting for almost one-fifth of world production and it is the world's largest exporter of soymeal Source: Statistics Canada and soyoil. Soybean production has increased steadily over the past five years due to increase in seeded area because of the devaluation of the peso, domestic economic reforms and transformation of the agricultural industry. For 2004-05, Argentine soybean production is projected at 39 Mt, up 6.0 Mt from the previous year. Exports of soybeans are expected to be about 7.5 Mt, similar to the five year average. Domestic processing of soybeans is expected to rise slightly, up by less than 1 Mt to about 26 Mt. This is a slowdown from the rapid pace of growth in the early 2000's when Argentine crushing grew by up to 20% a year. Similar to the US and Brazil, carry-out stocks are expected to rise to a burdensome 17 Mt, about 30% of the world carry-out, versus 13 Mt in 2003-04 and the five year average of around 10 Mt.

#### China is world's largest importer

Since 2000-01, China has emerged as a major driver in the world soybean market. For 2004-05, Chinese imports of about 23



For 2004-05, the soybean crush margin is trending between \$40 to \$60 a tonne as the drop in soybean meal and soyoil prices was matched by lower soybean prices. The soybean crush pace is forecast to remain strong for the rest of 2004-05 and into 2005-06.

Canadian Soybean Exports by Country of Destination						
	2002-	2003-	2004-	2005-		
	03	04	05e	06f		
	thousand tonnes					
Japan	140.5	253.3	250.0	250.0		
Iran	60.8	62.0	200.0	200.0		
France	33.9	19.4	125.0	125.0		
Netherlands	34.2	138.4	120.0	120.0		
Malaysia	119.8	96.8	100.0	100.0		
Belgium	37.2	91.1	50.0	50.0		
Finland	24.2	0.0	35.0	35.0		
Egypt	0.0	0.0	20.0	20.0		
Spain	40.1	10.1	15.0	15.0		
Other	232.5	242.5	<u>85.0</u>	85.0		
Total	723.2	913.6	1,000.0	1,000.0		
e,f: forecast, Agriculture and Agri-Food, April 2005						

Mt are expected to make up one-third of the world trade in soybeans. China is also the world's fourth largest soybean producer with output projected at 18 Mt. Chinese crush of soybeans has expanded by over 50% since 2000-01, to about 29 Mt forecast for 2004-05.

Some of the apparent growth in crush is due to the switch from small-scale processing, where the collection of official census data was uneven, to large scale operations where the data is easy to collect. Soybean crush capacity has expanded significantly in China over the past few years, largely in the coastal regions, through joint ventures between local companies and multi-national corporations.

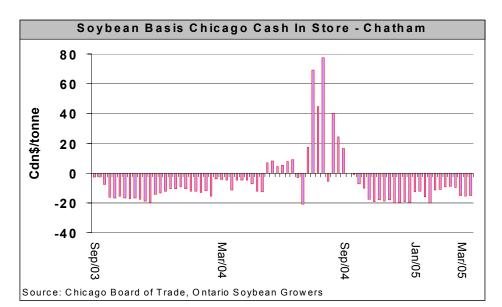
Edible soybeans account for about 40% of the soybeans consumed annually in China. China is a major producer and consumer of soy-sauce, tofu and soy-milk. Many of these edible products are made from soybeans with specialized characteristics generally either high protein or high-sugars. The size of the Chinese edible food market is expected to continue growing, making up a large, potentially underserved, segment for edible soybeans.

#### European Union: imports hold steady

Historically, the EU has been a major importer of soybeans. As a result of short supplies of protein meal, the EU imports between 14 Mt to 19 Mt of soybeans annually for processing. All of the soymeal is consumed within the EU while about one quarter of the soyoil is exported. With the soybean crush remaining relatively stable, the EU's position as a soyoil exporter has declined in relative importance.

#### Canada: record production due to good growing conditions in Eastern Canada

In Canada, soybean production is concentrated in the provinces of Ontario and Quebec, although within the past few years soybean production has expanded in Manitoba. During 2004-05, the area seeded to soybeans in Canada increased by 17% to about 1.23 mln ha. However, higher than



For 2004-05, the basis between Chicago-cash and Chatham soybeans is trending between minus \$10 to minus \$20 a tonne. The basis had flipped late in 2003-04 when the tight domestic supplies sent Ontario prices soaring. For 2005-06, the basis is forecast to average C\$10 to \$20 a tonne under the Chicago cash due to burdensome supplies.

normal abandonment, due to cold and wet growing conditions, resulted in harvested area rising by only 13% to 1.18 mln ha. Most of the loss occurred in Manitoba where almost one-half of the soybeans were abandoned. Growing conditions were near ideal in Ontario and Quebec where both provinces experienced the highest yields since 1999-00.

For 2004-05, a record 3.05 Mt of soybeans were produced, a 33% rise in output compared to 2003-04. By province, 2.48 Mt of soybeans were produced in Ontario, 0.54 Mt in Quebec and only 45,000 tonnes in Manitoba.

Demand for Canadian soybeans is expected to remain strong for 2004-05, despite competition from burdensome US and South American supplies. Domestic crush of soybeans is expected to decline but record exports are expected. Exports of Canadian soybeans have increased sharply to Iran and France, more than offsetting a decline in shipments to Belgium and Germany. Carry-out stocks are forecast to rise sharply.

#### Soybean prices drop sharply

For 2004-05, the average US farmgate price for soybeans is expected to drop to US\$5.40/bu from US\$7.34/bu a bushel in 2003-04. In Canada, soybean prices instore Chatham are forecast to average C\$245/t down from C\$395/t in 2003-04. The relatively larger price drop in Canada is largely due to the devaluation of the US dollar against the Canadian dollar from C\$1=US\$0.75 on March 31 2004, to trading around the C\$1=US\$0.81-0.83 cents in March of 2005. If the Canadian currency had remained stable, the expected price for Canadian soybeans would have been C\$245-285 a tonne for 2004-05.

#### OUTLOOK: 2005-06

The area seeded to soybeans is expected to remain stable for 2005-06 as a forecasted drop in the soybean area in the US offsets a projected small increase in the seeded area in Brazil. World soybean output is forecast to rise, as an increase in Brazilian production offsets a sharp drop in US output resulting from lower yields.

World soybean supplies are forecast to rise as the sharp rise in carry-in stocks supports the increase in output.

World crush of soybeans is forecast to rise slowly as pressured crush margins slow down the growth in crush capacity in developing countries. Other or edible consumption of soybeans is expected to grow due to increased consumption in a wide number of countries. Carry-out stocks are expected to rise sharply as the growth in supplies overwhelms the relatively slower growth in consumption. For carry-out stocks to remain at 2004-05 levels, the world soybean crush would have to rise by about 13 Mt and edible soybean consumption would have to increase by about 3.0 Mt.

#### US production to decline

For 2005-06, the area seeded to soybeans in the US is forecast to fall by 1.3 million acres to 73.9 million acres, with harvested area forecast to 72.6 million acres. Assuming normal growing conditions, yields are expected to decline to trend levels of 40.6 bushels per acre compared to the record yields set in 2004-05. Production is forecast to fall to 2.95 billion bushels for 2004-05, a drop of 190 million bushels from the previous year. Supplies are projected to rise slightly to 3.36 billion bushels as the sharp rise in carry-in stocks offsets the decline in output. Demand for US soybeans is forecast to grow slowly during 2005-06 with exports and crush forecast to rise by 50 and 40 million bushels, respectively.

Carry-out stocks are projected to rise to 425 million bushels and the average US farmgate soybean price is forecast to fall by US\$0.90 a bushel to US\$4.50 a bushel. Factors to watch include the impact of the Asian rust fungus, which can overwinter on the kudzu plant which is common across the southern US, the value of the US dollar and ocean freight rates.

#### Brazil

For 2005-06, the area seeded to soybeans is expected to rise marginally as the pace of expansion slows down under pressure from lower prices, higher fertilizer costs and higher ocean freight rates. Total soybean production is forecast to rise to about 66 Mt, assuming normal growing conditions and minimal impact from Asian Rust. Total supplies are forecast to rise to a record 87 Mt due to sharply higher carry-in stocks. Soybean exports are forecast to rise to 26 Mt while domestic crush rises to about 32 Mt. Carry-out stocks are projected to remain burdensome.

#### Argentina

The area seeded to soybeans is forecast to remain stable in 2005-06 under pressure from lower prices, implying a production of 38 Mt. Supplies are projected to rise to 55 Mt on support from sharply higher carry-in stocks. Soybean exports are forecast to rise to 9 Mt while the domestic crush rises slightly to 27 Mt. Carry-out stocks are forecast to rise to a record 19 Mt.

#### Chinese imports to rise

Soybean area is forecast to decline marginally for 2005-06 because of limited land area and domestic support for competing crops. Assuming trend yields, soybean production is forecast to decline slightly. Soybean imports are projected to rise to about 25 Mt for 2005-06.

#### **Record supplies in Canada**

The area seeded to soybeans is forecast to decrease marginally. Production is forecast to fall marginally as the return to trend yields more than offsets a rise in harvested area. Record large soybean supplies are forecast as large carry-in stocks more than offset the expected drop in output. Total domestic usage is forecast to rise to a record high of around 2.4 Mt for 2005-06 because of higher crushing volumes. Exports are projected to remain at 1.0 Mt, on support from shipments of identity preserved, edible soybeans into the human food market.

Carry-out stocks are forecast to remain burdensome.

The average price for Canadian soybeans, in-store Chatham, is forecast to decline to a range of C\$200-240 a tonne under pressure from lower US prices.

### Soybean market expands over the medium term.

By 2014-15, **world** soybean production is forecast to rise by 18% to 273 Mt with Brazil expected to overtake the US as the world's largest producer by 2010-11, according to the US based Food and Agricultual Policy Research Institute. By 2014-15, Brazil is expected to produce 35% of the world's soybeans while the US produces 30%. World soybean production is expected to become more concentrated with the US, Brazil and Argentina accounting for 85 % of the total world output.

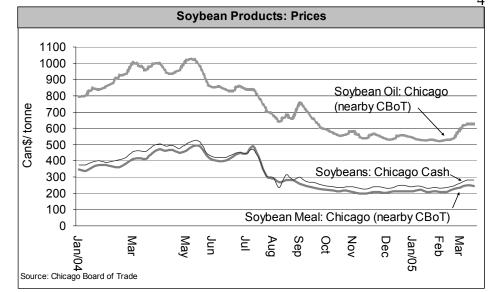
Growth in world soybeans usage is driven by **Chinese** demand as that country overtakes the US as the world's largest consumer by 2012-13. By 2014-15, China is expected to consume 22%, of the world's soybeans versus 18% currently. Consumption is expected to grow in Brazil and Argentina but the importance of the EU-25 is expected to decline because of its stable meal demand and high crushing cost. The utilization of soybeans by the rest of the world is forecast to remain stable at 10% of total world consumption.

By 2006-07, **Brazil** is expected to surpass the US as the world's largest soybean exporter and is expected to account for onehalf of the world shipments by 2014-15. Further expansion of frontier lands, conversion of pastures, improved yields and an improved transportation infrastructure is projected to support the soybean industry, which is projected to reach 95 Mt by 2014. Exports are expected to grow to 45 Mt by 2014-15, as the expansion of the crushing industry fails to keep pace with rising output. Crush capacity is projected to rise to about 50 Mt over the next ten years.

In **Argentina**, soybean area is forecast to rise by 29% over the medium term which combined with yield improvements is expected to result in a 36% rise in output. The domestic processing sector is expected to grow at the same pace, with most of the soy-products destined for export.

**US** market share is projected to decline from 44% currently to 28% by 2014-15. The area seeded to soybeans is projected to remain stable, while production rises slightly due to increasing yields. Domestic crush is projected to rise at about the same rate as production. Exports are projected to remain stable at 25 Mt

By 2014-15, **Chinese** import demand is forecast to grow and account for almost one-half of the world's imports of soybeans.



At the same time, Chinese soybean area is projected to decline by 8% with improved yields supporting a marginal rise in output. Driven by strong oil demand, soybean crush is projected to grow by about 6% annually over the medium term, reaching 48 Mt, while food use rises to slightly under 5 Mt annually.

**Canadian** soybean production is projected to rise to slightly over 3.0 Mt because of a stable seeded area and higher yields following the expected release of improved varieties. Canada is expected to remain competitive due to rising demand for soybeans in the crush, edible-food and biodiesel markets.

A number of organizations are coordinating efforts on market development for Canadian soybeans. The Canadian Soybean Export Association is a volunteer association of members of the Canadian soybean industry working to promote the export of soybeans and products into world markets. In the future, more of this work maybe assumed by the Canadian International Grains Institute. This work is further supported through breeding and agronomy efforts to develop premium, food-grade, identity-preserved, soybeans to meet specific consumer needs. Soyfoods Canada is focused on expanding growth in domestic soybean consumption for products such as soy-milk. The BioDiesel Association of Canada is investigating increased use of biodiesel in mass transit, marine and environmentally sensitive areas such as mines. The Vegetable Oil Industry Coalition is playing a major role in reducing interprovincial trade barriers as well as Trans-Fat issues.

Over the medium term, the factors to watch in the soybean market are: (1) the 2007 US farm bill, with early reports indicating a scaling back in support payments and possibly replacing the marketing loan rates with countercyclical payments, (2) the impact of Asian rust on US and South American soybean production, (3) the transfat issue, which may lead to reduced usage of hydrogenated oil, (4) the rate of expansion in South American soybean area, (5) the growth in Chinese import demand as the result of rising vegetable oil and meat consumption and (6) rising fuel prices and freight rates which increase the transport cost of soybeans and reduce South America's competitiveness into the Asian market.

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