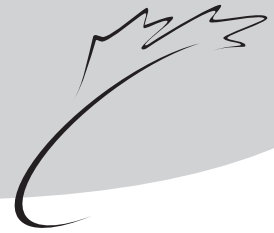




# Bi-weekly Bulletin

June 20, 2003 Volume 16 Number 12



## SOUTH AMERICA: SOYBEANS

For 2002-2003, South American soybean supplies are estimated to rise due to an increase in production in Brazil, Argentina and Paraguay. With this rise in production, South America has surpassed the United States (US) as the largest soybean supplier in the world. South American soybean trade is expected to rise significantly as exports from all three countries increase. World soybean crush is expected to more than offset the rise of South American and US soybean supplies, resulting in an increase in US soybean prices in 2002-2003. Canadian soybean prices have been supported by higher US soybean prices compared to 2001-2002.

### Situation

South American soybean production represents about 47% of the world's soybean output. The three largest soybean producing countries in South America are Brazil, which accounts for 57% of South American production, followed by Argentina at 40% and Paraguay at 3%. For 2002-2003 (October-September), South American soybean harvested area increased by 3.0 million hectares (Mha). Average yields increased to 2.82 tonnes per hectare (t/ha) from 2.62 t/ha in 2001-2002. As a result, South American soybean production is estimated by the United States Department of Agriculture (USDA) to have increased by 14.3 million tonnes (Mt), to 90.9 Mt for 2002-2003. Since carry-in stocks are similar to last year, South American soybean supplies increased by an estimated 19% to 93.6 Mt.

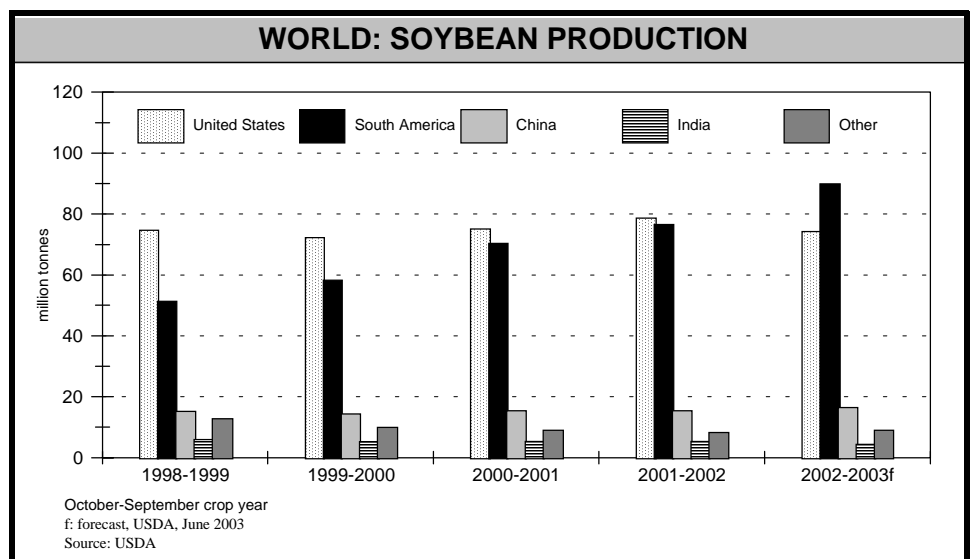
South American crush of soybeans is projected to increase slightly, to 54.8 Mt, as the rebound of soyoil and soymeal prices have supported crush margins. South American soymeal prices are being supported by strong demand and

soyoil prices continue to increase despite an increase in expected world edible oil production. South American soyoil output is expected to rise to 10.1 Mt or 33% of world soyoil production. Despite increased demand, 2002-2003 South American carry-out stocks of soybeans are estimated to be higher than last year at 1.7 Mt.

### Brazil

For 2002-2003, production of soybeans in Brazil is expected to rise 17% to a record 52.0 Mt, due to an estimated

record harvested area of 18.4 Mha and record yields of 2.83 t/ha. The increased area was the result of high soybean prices, a strong US dollar and a better return relative to corn and cotton. Brazilian producers shifted less than 1% of corn area and over 3% of cotton area to soybeans, with most of the increase in area coming from pasture and new land. The three states of Mato Grosso, Parana, and Rio Grande do Sul account for about 65% of Brazilian total soybean area and production. The Brazilian soybean harvest was completed at the



## SOUTH AMERICA: GENETICALLY MODIFIED (GM) SOYBEANS

**Brazil** has adopted provisional rules allowing the commercialization of GM soybeans for the 2002-2003 crop. Up until January 31, 2004, the Brazilian government will allow the sale of GM soybeans and will begin enforcing the existing ban on the seeding of GM soybeans in 2003-2004. Until then, producers are required to have their crop certified and labelled as either transgenic or conventional. It is estimated that in 2002-2003, about 30% of the Brazilian soybean crop is GM. In **Argentina**, GM soybeans have been approved and are popular among producers. GM soybeans are estimated to represent about 90% of the 2002-2003 crop. **Paraguay** has continued its ban on planting of GM soybeans, however producers have largely ignored the ban as transgenic soybeans reduce crop input costs between US\$30-40/t.

end of May, slightly behind the five-year average. The slower than normal harvest this season was attributed to rain delays in the west-central portion of the country.

Soybean yields have been trending upwards over the last 10 years, largely due to an increased ability to receive credit from financial institutions, allowing producers to maintain expenditures on effective crop inputs. Fertilizer sales in 2002-2003 have risen 13% above last year, due to the increase in area and fertilizer use. As pasture land is converted to soybean area, lime use has increased to neutralize the highly acidic soil and create viable cropland. A two-year term government credit is available up to R200,000 (US\$57,100) for soybean producers in west central and northern regions of the country and R150,000 (US\$43,000) for all other soybean producing areas at an interest rate of 8.75% per year.

As long as world soybean prices remain relatively strong and the exchange rate continues at about three Brazilian *real* to the US dollar, pasture and new land will continue to be brought under soybean production. Even if Chicago soybean prices were to fall to US\$4 per bushel, as long as the Brazilian *real* does not appreciate more than 10-15% against the US dollar, soybean area will continue to rise over the short term.

Brazilian supplies of soybeans are estimated to have increased 19% to 53.5 Mt, as marginally higher carry-in stocks combine with a rise in production. Imports, largely from Paraguay, are expected to fall marginally due to the rise in Brazilian soybean production. Exports are estimated to increase 4.4 Mt, to 20.6 Mt, due to the relative value of the *real* against the US dollar and the exemption of soybeans and soybean products from export taxation. The European Union (EU), specifically Netherlands and Germany, and China,

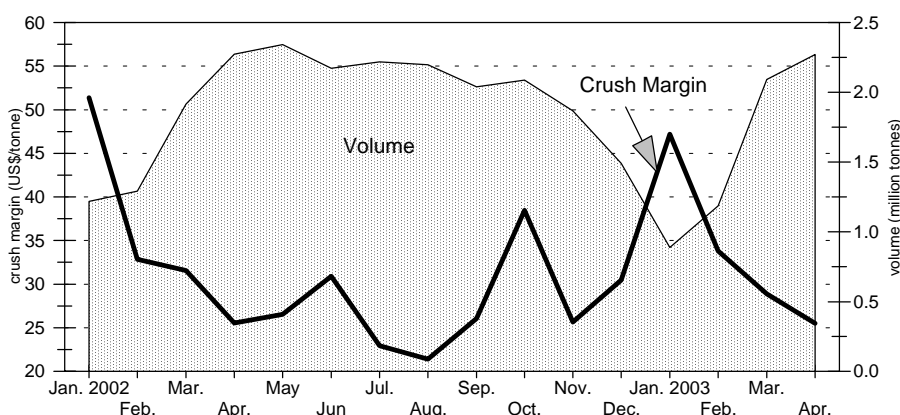
are Brazil's primary soybean markets accounting for about 55% and 25% of exports, respectively. Brazilian crushing of soybeans is also estimated to increase by 13% to 29.1 Mt. Carry-out stocks are estimated to rise to 1.0 Mt, significantly higher than 2001-2002.

Brazilian on-farm storage capacity is very small at 2.5 Mt, and as a result, cooperatives, private sector crushers and exporters handle the remainder of the storage. On-farm storage capacity, however, is increasing as larger producers invest capital. This may lead to a rise in carry-out stocks as soybean producers are less likely to deliver uncontracted soybeans to crushers when prices are less than optimal.

Current domestic crush capacity is 111,000 t/day, with 60% located in the states from Sao Paulo southward, but these states only account for about 45% of Brazilian soybean production. The central west states represent 27% of the crush capacity and 47% of the crop production. The industry shift to new production areas is slowly taking place, but because traditional production has taken place in the south, the south has better infrastructure and is closer to ports.

Infrastructure development continues to be critical to the growth of Brazilian agriculture. Due to the lack of nutrients in the soils in the central states of Brazil, crop inputs must be transported to the production areas. At the same time, soybeans grown in this area must be trucked more than 1,500 miles to reach an export point.

### BRAZIL: SOYBEAN CRUSH MARGIN VERSUS VOLUME



Exchange rate: R3 = US\$1

Source: Associação Brasileira das Indústrias de Óleos Vegetais (ABIOVE)

## CANADA AND BRAZIL: 2002-2003 SOYBEAN CROP BUDGET COMPARISON

	Canada <sup>1/</sup>	Brazil
	.....CAN\$/ha .....	
Seed <sup>2/</sup>	83.36	33.55
Fertilizer	28.41	72.27
Chemicals	105.47	80.26
Fuel	29.64	11.37
Repairs	40.76	2.61
Crop Insurance	26.18	13.02
Interest	7.90	14.21
Other	<u>1.89</u>	<u>68.05</u>
<b>Total Variable Costs</b>	<b>323.61</b>	<b>295.34</b>
Yield (t/ha)	2.28	2.83

<sup>1/</sup> Ontario soybeans 2002-2003 crop budget  
<sup>2/</sup> includes treatment costs

Exchange rate: R1.9 = CAN\$1  
Source: USDA, AAFC

Soybeans have traditionally been moved by truck in Brazil on a system of roads consisting of highways to mud roads. Privatization of major roads has increased the number of paved roads but this also has increased road tolls. As a result, truck freight costs have risen. The traditional single 27 tonne straight bed trailer has been replaced by double trailers that can carry about 40 t. However, the truck system has not been able to handle the increase in soybean production. As a result, the use of waterways and rail to transport soybeans to port location is expected to increase in the short term. Currently, 60% of soybeans are moved by truck, 33% by rail and 7% by water.

The only tariffs Brazil applies are the common Mercosur external tariff of zero for soybean seed, 9.5% for soybeans for crushing, 11.5% for crude soyoil, 13.5% for refined soyoil and 7.5% for soymeal. As a member of the Mercosur, Brazil applies no tariffs to imports from Paraguay, Argentina, and Uruguay.

### Argentina

For 2002-2003, harvested area increased slightly to 12.3 Mha as

sufficient capital has allowed Argentine producers to take advantage of the prospect of good returns to increase seeded area. Argentina's main soy region stretches from eastern Cordoba province to central and southern Santa Fe and northern Buenos Aires provinces and represents 40% of total soybean area. Yields are estimated to have increased to 2.85 t/ha as higher yields from greater first crop soybeans are expected to be more than offset by increased seeding in marginal soybean areas.

Corn production has the potential for higher returns compared to soybeans. However, the lower cost of production and reduced

risk of production has influenced producers to plant soybeans. Argentine producers have made up for a lack of credit and financing by cashing in some of last year's crop that was held back and stored on-farm. Crop input credit is being purchased by using next year's crop as collateral. As a result, Argentine soybean production is estimated to rise to a record 35.0 Mt, up from the 30.0 Mt estimated for 2001-2002.

Exports are forecast to rise by 56% to 9.6 Mt and domestic processing is projected to increase by 11% to 24.6 Mt. Since 1995-96, Argentina has become the world's largest exporter of soymeal and soyoil and is expected to make up 39% and 42% of the world trade in the two commodities respectively for 2002-2003. The

major soymeal markets are the EU, Poland, Malaysia, and Egypt, while the major soyoil markets are the EU, India, and China. The expansion in meal and oil exports is a result of differential taxes favouring the export of soy products over raw seed. After being tied to the US dollar at an exchange rate of 1 peso equal to 1 US dollar for 10 years, in January of 2002 the Argentine peso was delinked and the subsequent devaluation of the peso began. The devaluation of the peso has made production of soybeans more profitable.

For 2002-2003, soymeal production, exports and domestic use are each expected to rise about 10% above last year. Carry-out stocks are forecast to increase to 0.4 Mt, the highest since 1999-2000. For soyoil, production and exports are forecast to increase by 10% but domestic consumption is expected to rise marginally. Carry-out stocks are projected to increase marginally to 0.1 Mt.

### Paraguay

Soybean production is concentrated in southeast Paraguay, mostly on large, mechanized farms. For 2002-2003, production of soybeans in Paraguay is expected to increase 25% to 3.9 Mt due to an improvement in yields compared to

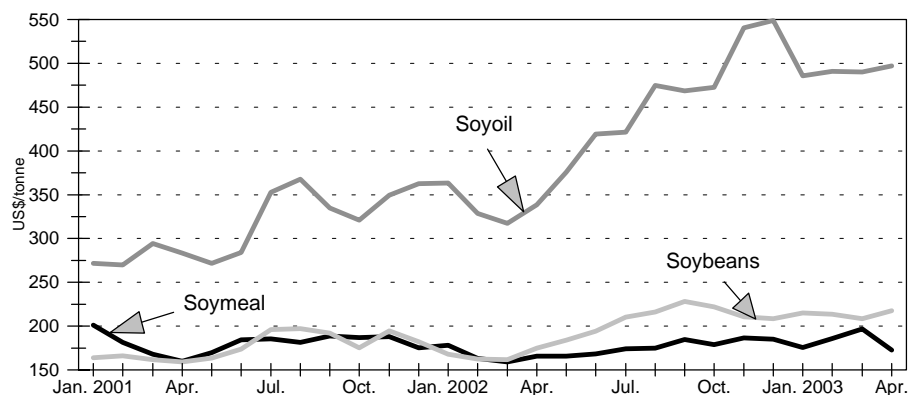
## SOUTH AMERICA: SOYBEAN SUPPLY AND DISPOSITION

<i>February-January crop year</i>	<b>1999 -2000</b>	<b>2000 -2001</b>	<b>2001 -2002</b>	<b>2002 -2003f</b>
Harvested Area (Mha)	23.5	25.6	29.2	32.2
	.....million tonnes.....			
Carry-in Stocks	0.8	0.6	0.5	1.4
Production	58.3	70.3	76.6	90.9
Imports	<u>1.2</u>	<u>1.3</u>	<u>1.5</u>	<u>1.3</u>
<b>Total Supply</b>	<b>60.3</b>	<b>72.2</b>	<b>78.6</b>	<b>93.6</b>
Crush	38.8	42.7	49.0	54.8
Exports	18.0	25.6	24.5	32.6
Other	<u>2.9</u>	<u>3.4</u>	<u>3.7</u>	<u>4.5</u>
<b>Total Use</b>	<b>59.7</b>	<b>71.7</b>	<b>77.2</b>	<b>91.9</b>
Carry-out Stocks	0.6	0.5	1.4	1.7

f: forecast, USDA, June 2003

Source: USDA

## BRAZIL: SOYBEAN AND SOYBEAN PRODUCT PRICES



Exchange rate: R3 = US\$1  
 FOB Paranaguá  
 Source: Associação Brasileira das Indústrias de Óleos Vegetais (ABIOVE)

2001-2002, as harvested area remained relatively unchanged. As a result, exports are forecast to rise from 2.1 Mt to 2.8 Mt and domestic crush is projected to increase slightly to 1.1 Mt. Domestic crush capacity has increased the last few years to about 30% of production due to renovations to processing facilities. Brazil is the main market for Paraguay's soybean exports, followed by the EU and Japan by way of ports in Brazil and Argentina.

Paraguay has no export taxes and the only tariffs it applies are the common Mercosur external tariff.

### Prices

Growing world demand for soybeans, and soybean products, has supported prices despite the rapid increase in South American production. Soybean demand was stimulated in 2000-2001 by a total EU ban on the use of meat and bone meal and related products in livestock and poultry feed. In 2001-2002, Asia increased its consumption of soybeans for the same reason. These foreign government actions caused a shift from animal-based protein feeds to soybean feed. World soybean carry-out stocks are forecast to tighten, largely in the US, and US prices have

strengthened in 2002-2003. As a result, Canadian soybean prices have increased to CAN\$310 per tonne (/t) in-store Chatham, up CAN\$41/t from 2001-2002.

### OUTLOOK

South American seeded area to soybeans is projected to rise slightly in the short-term. In Brazil, the area seeded to soybeans is expected to increase by about 0.3 Mha to around 19.2 Mha for 2003-2004 as domestic prices and continued application of newer technology encourage a rise in soybean area. This includes newer farm equipment and seed development through plant genetics. For Argentina and Paraguay, soybean seeded area is forecast to increase slightly due to supportive prices.

South American soybean production is forecast to rise slightly as higher yields complement the increase in seeded area. As a result, soybean supplies are forecast to increase as higher production is expected to offset a marginal decrease in carry-in stocks.

Soybean crush is projected to rise in 2003-2004 in Brazil and Argentina. The

Paraguayan crush is forecast to remain similar to this year.

Soyoil production in South America is forecast to increase for 2003-2004, and pressure prices, due to the increase in crushing volumes. For 2003-2004, Canadian soybean prices are forecast to fall due to lower US soybean prices, related to higher US and South American production, and the appreciation of the Canadian dollar.

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**Electronic version available at  
[www.agr.gc.ca/mad-dam/](http://www.agr.gc.ca/mad-dam/)**

ISSN 1207-621X  
 AAFC No. 2081/E

Bi-weekly Bulletin is published by the:  
**Market Analysis Division,**  
**Marketing Policy Directorate,**  
**Strategic Policy Branch,**  
**Agriculture and Agri-Food Canada.**  
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Issued also in French under title:  
*Le Bulletin bimensuel*  
 ISSN 1207-6228  
 AAFC No. 2081/F

© Printed on recycled paper

*While the Market Analysis Division assumes responsibility for all information contained in this bulletin,  
 we wish to gratefully acknowledge input from the following:*

Ontario Soybean Growers' Association, Canadian Embassy in Brasilia - Brazil (DFAIT),  
 Canadian Food Inspection Agency, Market and Industry Services Branch (AAFC)