



Bi-weekly Bulletin

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MALTING BARLEY: SITUATION AND OUTLOOK

Lower supplies of malting barley in Australia and Canada are expected to continue to provide strong support for malting barley export prices in 2004-05. However, this has been partly offset by downward price pressure from increased malting barley supplies in the EU, the strength of the Canadian dollar and high ocean freight rates. The low quality of the 2004-05 barley crops in Canada is expected to reduce Canadian exports of malting barley. This issue of the Bi-weekly Bulletin examines the situation and outlook for malting barley.

WORLD BARLEY MARKET

Barley accounts for 15% of world coarse grains use, second only to corn (68%). The barley share, however, is trending down. The increasing share for corn is due mainly to higher productivity gains, stronger demand from the growing poultry and hog industries and growth in industrial use.

The barley market consists of two major segments: the feed barley market and the malting barley market. In order to be selected for malting barley, the barley must meet certain quality standards, the most important of which are the protein content, extraction rates, plumpness and germination. If it is not selected for malting, the barley is used for livestock feed. In Canada, generally all barley is either the two-row or six-row variety but there are feed vs. malting varieties. About 70% of world barley is used for animal feed, 20% for malting, and 5% for direct food use. Trade in barley grain averaged 16 Mt over the past ten years, of which about 30% was malting barley.

For 2004-05, world barley production is forecast by the USDA to increase to 153 Mt, compared to 142 Mt for 2003-04 and the five-year average of 135 Mt. With the exception of Australia, production is expected to increase in all major exporting countries, especially in the EU-25 and Ukraine. Supplies are expected to increase by 3% from 2003-04, to 174 Mt, as increased production is only partially offset by lower carry-in stocks. World demand for barley, however, is forecast to decrease by 1% from 2003-04 to 145 Mt, but remain significantly higher than the five year average of 137 Mt. The major factor driving down world barley demand

is the reduction of feed barley consumption in the EU and Russia from last year's high to a more normal level. With production exceeding consumption by 7 Mt, world carry-out stocks are expected to recover to 29 Mt.

World barley trade is forecast by the USDA to increase from 15.1 Mt to 15.3 Mt. While exports from the EU and Ukraine are expected to increase significantly, exports from Australia and Canada are forecast to decline sharply. Imports by Saudi Arabia and China are forecast to increase.

WORLD MALTING BARLEY MARKET

The availability of malting barley depends on conditions in the general barley market. In general, high production of "barley" will imply high production of malting barley. However, crop conditions and the marketing system/infrastructure also play critical roles.

For 2004-05, world malting barley supplies are forecast by industrial sources to increase as higher production in the EU more than offsets lower production in Canada and Australia. World trade in malting barley is forecast to increase by 4% from 2003-04 to 5.1 Mt. Exports are expected to increase for the EU-25 and the US but the low quality of the barley crop in both Canada and Australia will reduce their exportable supplies.

MAJOR EXPORTERS

Lower Exports from Australia on a Smaller and Lower Quality Crop
Australia is the world's leading exporter of malting barley, accounting for about one-third of world trade over the last five

years, at an average of 1.7 Mt. The selection rate for malting barley in Australia averaged 36% of the crop and ranged between 30% and 49% over the last five years, the highest among major exporters

As the major competitor for Canada, Australia plays a dominant role in China, Japan, South Korea and other Asian markets. Australian barley is generally of lower protein content than Canadian barley, and enjoys low transportation costs, both inland and overseas. As a result it is generally very competitive in terms of price and quality. Canada and Australia also compete in the South African market.

For 2004-05, barley production in Australia is forecast by the Australian Bureau of Agricultural and Resource Economics (ABARE) at 6.2 Mt, 28% below last year's record crop and 4% lower than the 5-year average, due to a 6% decrease in area seeded and lower yields. Low subsoil moisture levels and below average rainfalls in September and October have reduced yields from the exceptional 2003-04 season. Production in South Australia, Western Australia, and Victoria, the top three producing states, is estimated to have dropped by more than 30%. Severe frost, unusual warmer temperature, and rain at harvest have adversely affected crop quality and the potential selection rate for malting barley.

As a result, malting barley supplies for the 2004-05 marketing year (Nov-Oct) are forecast by ABARE to decrease by 24% from 2003-04 to 2.20 Mt of which 0.17 Mt is expected to be absorbed by the domestic market, 0.56 Mt to be

exported as barley malt and about 1.50 Mt to be exported as malting barley. This represents a 30% decrease in Australia's malting barley exports from the record of 2.1 Mt in 2003-04 and an 8% drop from the five year average of 1.59 Mt.

Higher EU Production and Exports

The EU is the second largest exporter of malting barley and the world's largest exporter of barley malt. France is the leading EU exporter of malting barley, followed by Denmark and the new members, the Czech Republic and Hungary. The EU also enjoys the most diversified markets among the major exporters. China, Russia, Brazil, Colombia and Peru are among its major markets.

EU malting barley is dominated by two-row spring varieties. However, some two-row and six-row winter barley is grown in northwest Europe. The EU also has a relatively low select rate, of malting barley from the whole barley crop, at 20-25%. Although higher than the average of 16% for Canada, this is much lower than in Australia. The EU is also different from the other major exporters in that more of its malting barley production, 60-65%, is processed domestically, rather than exported unprocessed as grain, while that ratio is only 45% for Canada and one third for Australia.

For 2004-05, barley production in the EU-25 is estimated by the USDA to reach a five-year high of 61.8 Mt, 13% higher than last year and 8% larger than the average of last 5 years. A milder winter and adequate soil moisture boosted yields significantly in France, Germany, Spain and other member states, despite a slight decrease in area harvested. Meanwhile, with the substitution of feed wheat and corn for barley, domestic feed use is forecast to return to a more normal level of 38.0 Mt from last year's 41.0 Mt, although domestic food and industrial use remains unchanged at 15.9 Mt. EU barley exports are forecast to partially recover from last year's 1.0 Mt to 3.3 Mt, but are still short of the historical average of about 6.6 Mt. As a result, EU carry-out stocks are projected to recover robustly, from 4.0 Mt in 2003-04 to 8.9 Mt, compared to the historical average of 9.6 Mt.

Larger surplus supplies of malting barley in the EU, less competition from both Australia and Canada, and stronger import demand are expected to raise EU malting barley exports in 2004-05. Malting barley exports for the EU are forecast to increase from 1.1 Mt in 2003-04 to 1.3 Mt in 2004-05.

Lower exports from Canada

In Canada, about 75/25 per cent of the area seeded to barley is of malting/feed varieties. Newly released malting varieties tend to narrow the gap in yields between the two barley classes. Canada has the lowest selection rate of malting barley at about 16 per cent of the total barley crop, making Canada a consistent supplier of top quality malting barley in the world. The remainder is used for animal feed by the growing livestock industry in western Canada.

Canada and France are the major exporters with significant supplies of both two-row and six-row malting barley. With the development of new two-row varieties and to adapt to the growing demand for two-row barley overseas, the area seeded to two-row varieties in Canada has kept increasing, at the expense of six-row. In the last decade, the market share for two-row varieties has increased from less than 50% to more than 70%. Currently, two-row barley is produced mainly in Alberta and western Saskatchewan and six-row varieties are concentrated in Manitoba and eastern Saskatchewan.

In 2003-04, Canada produced 12.3 Mt of barley. Of the total supplies of 13.8 Mt, about 8.6 Mt, or 60%, were used for domestic feed and 0.9 Mt were exported as feed barley. For the 1.8 Mt selected as malting barley, at a rate of 15%, 1.6 Mt were exported, consisting of 0.9 Mt of malting barley and 0.7 Mt of barley malt (in grain equivalent). The major markets for Canadian malting barley were China and the US, with small volumes to South Africa and South America.

For 2004-05, barley production increased by 7% from 2003-04 to 13.2 Mt, as higher yields more than offset lower seeded area. The total supply of barley increased by 11 percent as a result of higher carry-in stocks. However, unfavourable weather conditions significantly reduced crop quality and the supply of malting barley. Low temperatures delayed planting and impeded the development of the barley crop. This was coupled with early frost which resulted in immature seeds, frost damage, and shrunk/broken kernels. Finally, rain at harvest caused severe fusarium and sprout damage in some areas, making it very hard to meet malting barley standards.

As a result, Canada's malting barley supply is forecast to decrease to 1.7 Mt, consisting of 1.5 Mt of two-row and 0.2 Mt of six-row. About 0.8 Mt is available for export as malting barley destined mainly for China and the US. Of the 0.9 Mt

processed domestically, 30% is expected to be consumed by the Canadian beer industry and 70% exported as barley malt.

Argentina: a Regional Player

Argentina has recently become a significant exporter of malting barley and barley malt, mainly to Brazil and other countries in South America. Barley production in Argentina is estimated at 0.7 Mt for 2004-05, more than three times the output in the 1980's. Exports are forecast to remain at 0.15 Mt for malting barley and 0.3 Mt for barley malt. The vast majority of Argentina's exports, both malting barley and barley malt, are expected to continue to go to Brazil, with the remainder to Chile and Uruguay.

MAJOR IMPORTERS

Higher Chinese Imports

China started importing malting barley in 1980 and has been the world's largest malting barley importer for more than a decade. In 2003, China replaced the US as the world's largest beer producer. The beer industry in China is growing very rapidly and currently requires about 3 Mt of malting barley a year - 1 Mt of which are domestically produced and 2 Mt are imported. China has been the leading market for both Australia and France and the largest market, second to the US, for Canada.

In 2003-04, malting barley imports into China decreased from 1.9 Mt in 2002-03 to 1.4 Mt, due to larger domestic supplies and higher carry-in stocks. Although the official estimate of China's barley production, at 2.7 Mt, is significantly lower than the historical trend and USDA's estimate of 3.4 Mt, domestic supplies of malting barley were estimated at 1.3 -1.4 Mt, significantly higher than the historical average of 1.0 Mt. In addition, the outbreak of SARS in the spring 2003 reduced China's beer consumption, leaving higher stocks, mainly imported malting barley, carried over to 2003-04.

For 2004-05, barley production in China is officially estimated to have increased to 3.7 Mt, due mainly to higher area seeded to barley. However, domestic supplies of malting barley are expected to be well below 1 Mt. Drought conditions during vegetation and rain at harvest affected protein content and screenings in northeastern China and the lower Yangtze River valley, leaving northwestern China the only major producing region with a normal selection rate. As a result, prices for domestic

barley have increased from US\$170/t last year to a historical high of US\$210/t.

Based on an average malt usage of 10 Kg/hl, China's total demand for malting barley is forecast at 3.3 Mt in 2004-05, suggesting an import demand of 2.75 Mt. However, as seen in the past, malt usage in China is very price-sensitive and imports are forecast to increase to only 2.0 Mt.

Lower US Imports on Larger Domestic Supply

The US is the second largest beer producer in the world. However, US government support programs have reduced area seeded in traditional malting barley areas. As barley demand for food and processing remained stable at nearly 4.0 Mt, malting barley imports have increased to about 0.5 Mt, while exports declined to 0.2 Mt.

Although the US malting barley market is still dominated by six-row varieties, two-row varieties have gained popularity in recent years. In North Dakota, the leading state in US malting barley production, farmers favour six-row varieties due to the relatively humid growing conditions in the Red River Valley. However, malting barley production and processing capacity have increased in Montana and Idaho where drier growing conditions allow a higher production of two-row varieties and the selection rates are much higher than in North Dakota. Currently, two-row varieties account for 20% of US barley area, while six-row varieties account for 80%.

US malting barley imports have trended lower in the past decade, from an annual average of 0.7 Mt to less than 0.5 Mt, while imports of barley malt, mainly from Canada, increased sharply. However, the US has been the leading market for Canadian malting barley and is expected to continue to be one of the major markets for Canada. For 2004-05, US imports are expected to continue the downward trend, decreasing from about 0.5 Mt in 2003-04 to 0.45 Mt, due to higher US carry-in stocks, large domestic production with good quality, and concerns over exportable supplies from Canada.

Russia has Great Potential

Russia has been the world's second most rapidly expanding beer market after China in recent years and the market is expected to continue to grow, albeit at a rate lower than the current annual average of 20%. The rising consumption is attributed to increased consumer incomes and

changes in government taxation favouring beer over vodka.

Russia requires about 1.2 Mt of malting barley annually. About one third of the requirements are sourced from domestic production. Russia's imports consist of an average of 0.17 Mt of malting barley and 0.73 Mt of barley malt (in grain equivalent). In addition to the growth in beer consumption, the building-up of new domestic malting capacity will boost Russia's malting barley imports significantly, substituting for malt imports.

The EU has been the predominant supplier of both malting barley and malt for Russia. This situation is expected to continue, although the balance is projected to shift rapidly from barley malt to malting barley. However, developments in the Russian market are expected to become more relevant to all market players, including Canada.

PRICES

World Prices

World malting barley prices are heavily dependent on several factors: (a) the quantity and quality of the barley crop available for selection in the major exporting countries, which, in turn, is closely related to weather conditions; (b) world feed barley prices which are affected by US corn prices and barley supplies in the Black Sea region and the EU; (c) policies in the major exporting and importing countries, such as export subsidies in the EU; and (d) demand from the major importers.

For 2004-05, decreased exportable supplies and lower crop quality in Australia and Canada are providing strong support to world malting barley prices. Strong import demand, particularly from China, will also support world prices. However, the strength in malting barley prices is expected to be partially offset by larger supplies from the EU. The weakness in the world coarse grain market is also expected to pressure malting barley prices.

Record US corn production and larger exportable supplies of feed barley from Ukraine and the EU lead to the weakness in world coarse grain prices, although world demand remains strong. World feed barley prices are expected to be further depressed by EU export subsidies. While suspended in 2003-04, EU export refunds for barley were re-introduced in October 2004. For the crop-year to date, the EU has applied subsidies on 0.86 Mt of barley at an equivalent of US\$23.61/t.

As a result, world feed barley prices for 2004-05 are forecast to decrease by 15%, or about US\$20/t, from 2003-04 to US\$110/t at PNW. For malting barley, world prices in US dollar are expected to average US\$150/t at PNW, US\$155/t in Adelaide, Australia, and US\$160/t at Rouen, France

Canadian Returns/Prices

Malting barley prices for Canadian farmers are expected to be pressured further by the strength in the Canadian dollar and higher ocean freight rates.

The Strength in Canadian dollar

The exchange rate for the Canadian dollar is expected to average Cdn\$1.23 per US\$ for 2004-05 versus Cdn\$1.34 and Cdn\$1.50 per US\$ in 2003-04 and 2002-03, respectively. The stronger Canadian dollar alone would cause malting barley prices, in Canadian dollar, to drop by 8% from 2003-04.

A strong Canadian dollar has implications for prices/returns, not only in Canada, but for Canada's competitiveness in the world market. However, the impact is mitigated by the fact that major competitors' currencies also appreciated against the US dollar. For 2003-04, the Euro and Australian dollar strengthened by 2% and 9%, respectively, against the Canadian dollar, meaning that changes in these exchange rates put Canada in a better position to compete. However, the situation has changed for 2004-05 as the Canadian dollar has gained 2% and 4% against the Euro and the Australian dollar, respectively, making Canada less competitive.

Higher Ocean Freight Rates

For 2004-05, freight rates are expected to average US\$40/t from the PNW to China vs. US\$29/t in 2003-04 and US\$27/t in 2002-03. Given the strong demand for and the inelastic supply of dry bulk ocean freight services, freight rates are widely expected by the industry to remain high for at least a few years. Higher freight rates have the effect of depressing export prices and raising import prices, with some of the extra cost ultimately born by Canadian farmers.

However, major competitors have been affected similarly, if not more. Freight rates for 2004-05 from Australia to China are expected to average US\$30/t vs. US\$27/t in 2003-04 and US\$18/t in 2002-03. Therefore, as in the case of exchange rates, high ocean freight rates have a large impact on Canada's export

returns/prices, but a less significant impact on Canada's competitive position in the world malting barley market.

The 2004-05 CWB Return Outlook (PRO) in January 2005, in-store Vancouver/St. Lawrence is \$178/t for Special Select Two-row and \$162/t for Special Select Six-row designated barley. The PROs are about \$20/t lower than 2003-04 PROs this time last year and, if realized, represent one of the lowest total payments to producers in the last few years.

OUTLOOK FOR 2005-06

For 2005-06, world barley production is expected to decrease by about five percent to 145 Mt, as lower production in Europe and North America more than offset higher production in Australia. Crop quality in Canada and Australia is expected to return to more normal levels, raising world malting barley supplies. Import demand is expected to remain strong for China, Russia, Latin America and the US. US corn prices are expected to increase slightly due to lower production. A stronger world feed barley market is expected to support world malting barley prices. However, the Canadian dollar is expected to continue to be strong which could partially offset the gains in higher commodity prices

LONGER TERM OUTLOOK

For the period of 1996-97 to 2002-03, world consumption of feed barley trended down, from more than 100 Mt to 92 Mt and world trade fluctuated between 9.8 and 13.8 Mt. For the same period, world trade in malting barley increased from 3.8 to 5.0 Mt. Trade in barley malt increased from 4.6 Mt to 5.7 Mt.

For the 2003-04 to 2008-09 period, malting barley trade is forecast by IGC to increase by 1.2 Mt to 6.2 Mt, while world trade of feed barley is expected to increase by only 0.8 Mt to 13.4 Mt and world trade of barley malt to stagnate at 5.5 Mt.

The proportion of feed barley trade is, therefore, expected to decline from about 60% in the early 1990's to 50% by 2008-09. The malting barley and barley malt sector is forecast to gradually expand due to rising beer production in several countries. Within the malting sector, the grain component of trade is set to gain ground on malt, as malting capacity expands for key importers.

The beer industries in the developed economies are generally in the mature stage. Per capita beer consumption has either declined or stagnated in the last

decade, due to increasing awareness of the health risks associated with heavy alcohol use, changes in consumer preference (the rising popularity of red wine and some soft drinks), increased competition from other beverages (flavoured alcoholic drinks), and more restrictive government regulation and taxation

Declining beer consumption in North America, Western Europe, Australia and Japan, combined with the substitution of rice for barley and the popularity of low-malt beer have constrained the growth in demand for malting barley. However, beer consumption has been increasing in developing countries in Asia and Latin America and in eastern Europe and the CIS, as a result of fast economic development and higher income. Included in the countries with the greatest growth potential are China, Russia, Brazil, Mexico, Argentina, Thailand and Vietnam. These regions are expected to drive up world demand for malting barley in the decades to come.

Chinese Demand

Higher income, urbanization, and a larger proportion of young people are expected to continue to drive up China's beer consumption and, thus, malting barley demand in the decades to come. However, new initiatives in China's barley sector could have significant long-term implications for the world malting barley market and Canada's export potential to China.

In reaction to years of high prices and supply fluctuation in the world malting barley market, China's Ministry of Agriculture has drafted a five year plan to boost China's domestic malting barley production and partially substitute for imports, by identifying and tackling issues in China's domestic malting barley supply chain. If implemented successfully, malting barley imports into China could be reduced significantly and world prices could be pressured downward over the medium-to-long term.

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