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CHINA: COARSE GRAINS

Canada has a significant share of China's malting barley market and a small, but growing, share of its pork and beef markets. China's membership into the World Trade Organization (WTO) became effective in December 2001. The commitment to minimum tariff rate quotas (TRQ) and overall reductions in tariffs, is expected to provide increased market access for coarse grains and meat. In conjunction with growth in population and income, the more liberal trade environment is expected to provide support for corn prices, and coarse grain prices in general, and increased marketing opportunities for Canada over the medium to long-term. This issue of the *Bi-weekly Bulletin* will examine the situation and outlook for coarse grain in China and the implications for Canada.

DEMOGRAPHICS AND ECONOMY

China is the most populous nation in the world at 1.26 billion people increasing by 10-15 million per year. About two-thirds live in rural China and, of those, it is estimated that there are 470 million labourers and 300 million farmers. Small changes in per capita food demand and domestic supply can have major effects on world agricultural trade because of the sheer size of the population.

Since the 1970s, China has become one of the fastest growing economies in the world and during the period between 1978-1996, average annual real gross domestic product (GDP) increased almost 10% per year. China's economy is the third largest in the world. As a result of the tremendous industrial growth, the share of agriculture in the GDP dropped from 58% in 1952 to less than 25% in 2000.

Land and Water

China has one-fifth the world's population but only 10% of it's arable land. Cultivated land per capita is only about 0.1 ha. All land is leased from the government based on family size and on terms which vary with the crop sown. For corn, a new round of leases were approved several years ago and are typically for 30 years. Cultivated land is expected to decline due to

construction of houses, roads, and factories. New land claimed for farming is generally of poor quality and less productive.

China is facing serious threats from soil erosion, degradation of water, salinisation, acidification, desertification, low water permeability and other interrelated properties. The gradual losses in soil quality have, over the years, been masked by the continued use of inputs.

China is one of the driest countries in the world. Water shortages in the north and the north east are very acute where the majority of the corn is grown. More than one-half of the cities experience water shortages. Beijing gets most of its drinking water from a reservoir but, due to successive droughts and soaring consumption, it is a third as full as it once was. Industry and agriculture are utilizing water at such a high rate that it is possible that the northern region may run out of water in 15 years. Industry and agriculture's dependance on the Yellow River is so great it often dries up before reaching the sea.

To address this, the government is preparing to spend over US\$20G to divert water from the Yangtze River basin to the dry northern region in one of the world's

largest water diversion schemes. This project is expected to be completed in 2010 but will only partially address the north's water shortage. The ongoing concern is not related to the immediate benefits of increasing yields through irrigation, but on the long-term effects on soil salinity created by irrigation in these arid regions.

WTO COMMITMENTS

China's entry into the WTO has dramatically cut import barriers imposed on agricultural products. The China National Cereals, Oils, and Foodstuffs Import and Export Corporation (COFCO) currently controls the corn market and allows imports through the State Development and Planning Commission (SDPC). China has reserved a percent of trade for importation through state trading enterprises, with the remaining portion allocated to private entities. As part of the WTO accession package China has set up a TRQ for commodities with increasing minimum import market opportunities. For corn for 2002, 33% of the TRQ allocations will be reserved for the private sector (non-state trading entities) initially, rising to 40% by 2004.



Quota amounts are first recommended by the SDPC, and then approved by the State Council. Once levels have been set, the quota allocations to individual firms are administered by the Ministry of Foreign Trade and Economic Cooperation, which in turn grants licences to specific companies to import specific quantities.

China has agreed to administer its TRQ so as to maximize the likelihood that they will be used. For example, TRQ allocations will be redistributed to other non-state trading entities if they are not used by the companies that receive the original allocation. Additionally, if any portion of the TRQ allocated to state traders is not contracted by October for any given year, it will be reallocated to non-state trading entities.

China has agreed to eliminate all export subsidies, which were about US\$45/t on corn for 2000-2001, and to limit domestic support to 8.5% of the value of each product and to 8.5% of the value of total agriculture production. This is between the 5% and 10% for developed and developing countries, respectively. China will not have access to Article 6.2, under which developing countries have unlimited access to specific input and investment subsidies. Current Chinese spending on domestic support is well-below the negotiated limit. However, due to monetary constraints, it is widely thought that China will not increase domestic support beyond current levels.

For the first time since the household responsibility system was introduced in 1979, 20 million farmers in China's Zhejiang Province, in a pilot experiment, can now grow whatever they like. Additionally farmers in five provinces will

be allowed to trade grain without any government intervention. However, these provinces are not in major grain producing areas and the new regime is expected to have little impact on coarse grain production. Nevertheless a marked move towards a market-oriented grain trade is clear. It is expected that most farmers will shift production away from required crops such as corn, to more profitable crops such as fruits and vegetables because of the relatively small contract plots and the high labour/land ratio.

China has eliminated several major opaque sanitary and phytosanitary (SPS) barriers and has agreed that future SPS restrictions will be limited by the rules governing the WTO. Importers must obtain licenses from the China Inspection and Quarantine authorities for each product designated for import.

A value added tax (VAT) historically has been applied to imports as well as domestic products. The VAT rate was often unevenly applied and variable. Imports were more likely to be fully taxed than domestic products. Through the new WTO agreement, grain imported through government state traders and below the TRQ levels are not subject to the VAT. This puts private traders at a disadvantage in handling both domestic and imported grain.

AGRICULTURE

Corn

China is second only to the U.S. as the world's largest producer of corn. In 2001, due to drought-like conditions, China produced 108 Mt, down from the record high of 133 Mt produced in 1998. Chinese corn production has increased dramatically

during the past ten years, primarily due to high domestic support prices. As a result, carry-out stocks at the end of 1999-2000 (October-September) reached a recorded high of over 102 Mt. Despite large state owned stocks, grain bureaus were not able to sell much of their stocks, since they cannot take losses on domestically sold corn and much of what was in storage was high priced corn from previous years.

To address the large build up of stocks, in 1999 the government lowered the official procurement prices and allowed local grain bureaus to purchase below official prices based on failure to meet quality standards. Prices were allowed to vary depending on the amount of moisture and variety of corn. China also began to subsidize corn exports. The central government usually pays 70% of total subsidies, while local governments are required to pay the remaining 30%. In 1999-2000 and 2000-2001, China subsidized corn exports of 9.9 Mt and 7.3 Mt respectively.

Domestic consumption of corn has grown steadily since the early 1960s due to expanding livestock and poultry production. In 2001-2002, China is forecast to consume a record 124 Mt of corn, compared to 113 Mt in 1997-1998, increasing at an average rate of about 2% per year.

Because past procurement policies were based strictly on weight, farmers adopted lower quality, longer growing varieties, that were usually harvested with higher moisture levels. Production of higher quality corn is expected to increase due in part to the government's new procurement standard that rewards quality, and is expected to produce nutritionally higher value varieties but with slightly lower yields.

Arable land is thought to have been understated in China, indicating that yield estimates may have been over stated. During the last 20 years, while China has had remarkable increases in corn yields, they still lag well behind the U.S. and other major producing nations. This suggests that corn yields may easily have scope for further increases. The WTO agreement allowing for unlimited amounts of soybean imports into China and high domestic corn prices in 2001 may also result in increased area seeded to corn for 2002.

Area seeded to corn will be constrained by concerns over irrigation costs. Due to tightening water supplies in north China,

CHINA: TARIFF RATE QUOTAS AND IMPORT DUTIES								
			TRQ DUTY		VAT			
	·	Total	Private sector share	In Quota	Out Quota			
		million tonnespercent		percent				
Corn	2002 2003 2004	5.85 6.53 7.20	1.93 2.35 2.88	1 1 1	114 114 114	13 13 13		
Barley		-	-	3	-	-		
Beef	frozen chilled offal		- - -	12 25 12	- - -	- - -		
Pork	(all)	-	-	12	-	-		
Source: USDA								

future yields will have an increasingly higher dependancy on precipitation. Farmers are expected to switch to vegetables and fruit production which provide a higher net return per unit of water used. Also, due to governmental concerns over erosion, land seeded to corn on areas such as extreme slopes are expected to be taken out of production.

Under the WTO agreement, China has agreed to permit imports for a minimum amount of corn at a reduced duty. In 2002 (January-December), the minimum access for imports is set at 5.85 Mt, of which 1.93 Mt is expected to be imported directly by end users. Under the TRQ, the inquota duty will be set at 1%, while the outof-quota duty will be 114%. The VAT rate for corn will be 13%, but is only applied to corn imported by private traders and outof-quota amounts.

Due to logistics, the cost of transporting, corn from northeast China to South Korea and Japan is lower than the cost of transporting it into China's south. Therefore, it is expected that most of the imported corn will be destined for southern China, while some of the corn grown in northeast China will continue to be exported to South Korea and Japan. Officials in the Northeast are developing long-term marketing plans for these markets by making commitments to building better cleaning, handling and export facilities and by developing new varieties of corn that will be more competitive with U.S. corn.

Barley

The majority of barley either domestically produced or imported into China is malting barley for beer production. Chinese barley

production in 2001 is estimated to be 2.5 Mt and has been trending downward since about 1988 when about 5.2 Mt were produced. Imports during this period have risen from 0.3 Mt in 1988-1999 to about 2.3 Mt expected in 2000-2001. In 2000-2001 (August-July), Canada exported about 0.6 Mt of malting barley to China, representing about 25% of Chinese malting barley imports. In 2001-2002, due to lower available supplies, Canadian exports to China are expected to be just over 0.2 Mt.

China is the world's second largest beer producer and the largest malting barley market. Per capita

beer consumption in China in comparison to Western rates is low. However, rates have risen from an average of 9 litres per year (L/yr) in 1992, to about 17.5 L/yr in 1999-2000. Consumption is expected to continue to increase over the next several years due to higher incomes and increased population. In 2007-2008, per capita beer consumption is expected to increase to about 21.5 L/yr. Forecasts based on these projections indicate that China will need to import about 3.5 Mt of malting barley in order to supply their malting industries. Canada is projected to supply China with about 0.8-1.0 Mt of malting barley during 2007-2008.

The rapid rationalization and amalgamation of the Chinese brewing and malt industry is resulting in fewer and larger processors. As a result, China is reported to be moving away from its traditional beer production methods to a more technologically advanced system which requires a consistently higher barley quality not previously demanded. Clean, high quality barley, such as that produced in Canada is well suited to meet the requirements of an increasingly quality conscious Chinese malting barley market.

The WTO agreement imposes no TRQ restricting the import of minor grains such as barley, however a duty of 3% will be applied.

Malt

Historically, China has been a very small importer of Canadian malt due to a prohibitive tariff on malt imports. China's post accession into the WTO will lower the tariff on all imported malt from 26% to 10%. However, China has recently made substantial investments in their malting

CHINA: COARSE GRAINS SUPPLY AND DISPOSITION Oct.-Sep. 1998 1999 2000

crop year	-1999	-2000	-2001	-2002	
	million tonnes				
Carry-in Stocks	88.8	102.6	102.7	81.5	
Production	143.5	137.2	114.0	116.2	
Imports	2.6	2.2	2.4	3.6	
Total Supply	234.9	242.0	219.1	201.3	
Food	38.8	37.7	36.0	36.2	
Feed	90.1	91.6	94.4	98.5	
Exports	3.4	10.0	7.2	3.0	
Total Use	132.3	139.3	137.6	137.7	
Carry-out Stocks	102.6	102.7	81.5	63.6	

Source: USDA, December 2001

infrastructure and malt imports are expected to increase only modestly.

Beef

Cattle numbers in 2002 are expected to increase to 130 million head (Mhd) compared to 128 Mhd estimated for 2001. Since about 1985, the number of beef cows has increased from 40 Mhd to 60 Mhd to supply increasingly higher domestic demand for beef. Over the last six years, China's beef production expansion was aided by a shift in land that had been seeded but was not suitable for grain production, to livestock grazing and forage production. While dairy cows account for only 5% of total cattle, over the past several years their growth has accounted for nearly all the increase in total cattle numbers.

The Ministry of Agriculture, in an effort to expand beef exports, plans to construct five animal disease-free zones by 2002. Most of these zones are geographically isolated, so that animal diseases will be easy to isolate. This is a major effort to meet the criteria for prevention of animal diseases set by the Office International Des Epizooties (OIE) and the WTO. A prevention, quarantine and monitoring framework for animal diseases is to be developed strictly in accordance to OIE standards.

Despite the rapid increase in the number of beef cows, beef production is constrained by poor genetics, expensive forage and fodder cost. The growth of the dairy industry in China has served the dual role of suppling urban consumers with sufficient supplies of dairy products and low cost hamburger and other utility cuts. High-end table cut meats, low-end cuts

and offal imports are all expected to grow strongly over the next several years. China's entry into the WTO, entailing significantly lower tariff rates for all beef, should provide a boost for imports. The tariff rate on frozen meat is expected to eventually fall from 45% to about 12%; on chilled meat from 45% to 25%; and for offal from 20% to 12%. Currently Canadian exports of beef to China consist primarily of beef offal and live animals. Exports have been growing steadily from about \$1M in 1994 to \$1.9M in 2000.

Pork

2001

China is the world's largest pork producer. In 2002, Chinese hog production is forecast to reach an historic 575 Mhd versus 340 Mhd in

CANADA: EXPORTS TO CHINA								
	1997	1998	1999	2000	2001f			
	thousand tonnes							
Barley 1/	594	289	378	511	300			
	CAN\$ (thousands)							
Pork 2/	2,444	3,516	2,857	7,396	6,955			
Beef 2/	978	615	609	921	960			

1/ August-July crop year

2/ (meat and offal) calendar year

f: forecast, December 2001 Source: Statistics Canada

1999. Pork represents about 74% of China's meat production and is by far the most consumed and favoured red meat in China. The majority of the pork produced is on small "backyard" family operations, however, commercialization and foreign-backed joint operations are playing an increasing role in China's pork production.

China is a net exporter of pork. However, exports are a small percent of production and are limited to Singapore. Restrictions imposed by countries such as Japan because of disease concerns, constrain expansion to meeting domestic demand.

Imports have risen from zero in 1994 to about 140,000 t expected in 2002. Like beef, the majority is offal. While Canadian exports of pork to China are relatively small in comparison to our major markets, exports have risen significantly during the last seven years. For example, in 2000 the value of Canadian pork exports to China was \$7.4M, compared to \$0.1M in 1994. Bans on European and Brazilian offal, due to concerns over foot and mouth disease. have aided Canadian exports to China. With import tariffs on all pork set to decline from 20% to 12% because of WTO accession, combined with relaxed restrictions that allow any domestically registered company to import pork, Canadian exports should further increase.

Poultry

Poultry meat consumption is increasing rapidly and is outpacing pork in terms of growth. Consumption for 2002 is expected to reach a record of close to 13 Mt. Chinese poultry exports in 2002 are expected to reach 0.5 Mt, while imports are expected to reach a high of 1.0 Mt. The main challenges facing China's poultry

industries are breeding and disease control. Exports in 2001 were lower than expected due to a temporary ban by Japan, the EU and South Korea stemming from disease concerns. Exports are expected to continue their upward trend because the Chinese domestic broiler industry is considered sophisticated and is expected to successfully resolve these export challenges.

OUTLOOK

China's dramatic increase in livestock and poultry production is expected to result in record coarse grain demand. Over the last two years, consumption of coarse grains has outstripped production by about 25 Mt. The WTO agreement will help to address any shortfall. Agreements in place for corn imports up to 2004 will be limited by TRQ levels established by the Working Party on China's Accession. High tariff rates applied to levels beyond these minimum amounts will make imported corn cost prohibitive. Over the medium-term, China is expected to shift from a net corn exporter to a net importer which will benefit Canada by supporting world prices.

Concerns that China may not comply with WTO commitments, have been expressed by industry. In particular, these concerns centered around China's new, yet to be defined, rules concerning genetically modified organisms which could be used as a technical barrier to imports and as a means to provide price protection. Additionally the government still hasn't made it clear how it will administer its TRQ, or how it will be allocated. However, corn consumption trends, which point to utilization outstripping production, suggest that over the mid-term China will require significant amounts of imported corn.

Canadian malting barley producers are expected to benefit directly as Chinese consumption of beer is expected to increase substantially. Clean, consistent Canadian malting barley and improvements in varieties which suit the increasingly demanding needs of Chinese processors will result in higher sales.

Since the mid-1990s, China has been a grain self-sufficient economy, with the net

import situation never exceeding 5% of domestic grain production. However, because of severe land and water constraints and the sheer size of the Chinese market, small shortfalls in coarse grain production could translate into large future import demand. Rapid economic growth and higher incomes levels are resulting in increasing meat consumption. Large, potential meat exports may be possible should China's livestock industry not be able to keep pace with demand. Lower import tariffs on grains and meat will result in a more competitive import price and increased access to Chinese markets

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GREETINGS OF THE SEASON AND BEST WISHES FOR THE NEW YEAR!

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