

Bi-weekly Bulletin

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DURUM WHEAT: 2005-2006 SITUATION AND OUTLOOK

Prices for durum wheat are expected to decline relative to those for non-durum wheat in 2005-2006 due to sharply higher supplies in Canada and the United States (US), the major durum-exporting countries. Canadian Wheat Board (CWB) pool returns for durum are expected to be below those for similar quality Canada Western Red Spring (CWRS) wheat for the first time since 1990-1991. This issue of the *Bi-weekly Bulletin* examines the situation and outlook for durum wheat.

Demand Considerations

Durum wheat (Triticum durum) has unique characteristics making it a "specialty wheat" in world wheat markets. The substitutability of common wheat (t. aestivum) for durum wheat is therefore limited, while durum is unsuited for many of the products produced from common wheat. The major durum products are pasta and couscous, a staple food in North Africa. Good quality durum has a very hard vitreous (glassy) kernel (HVK), with an amber yellow endosperm, while common wheat, even hard red spring wheat, is less vitreous and has a white endosperm. Durum pasta maintains a firm texture when cooked, and its natural amber colour is associated with good quality pasta. It should be noted that Asian-style noodles are made from common wheat, not durum. In Europe and North America, pasta products (spaghetti, macaroni, etc.) are generally produced exclusively from durum semolina, although other countries traditionally have used common wheat or durum blends to produce pasta. New production technology, such as high temperature drying, has improved the quality of pasta that can be made from common wheat, but discriminating pasta

consumers continue to prefer pasta made from 100% durum wheat. In North Africa, durum is preferred for the production of couscous. While durum is also used for bread production in some countries, particularly North Africa, this usage is quite limited in terms of total world durum utilization.

As a result of these unique characteristics, the demand for durum tends to be quite inelastic, meaning that a small shortage of durum can result in a large increase in durum premiums over common wheat while slightly excessive supplies can result in sharp price declines. Even if global supplies of common wheat are abundant, a shortage of durum can result in high durum prices, as most end-users are unwilling to switch to common wheat. Conversely, because the market beyond traditional pasta and couscous production is limited, a relatively small increase in durum production can result in large durum price declines.

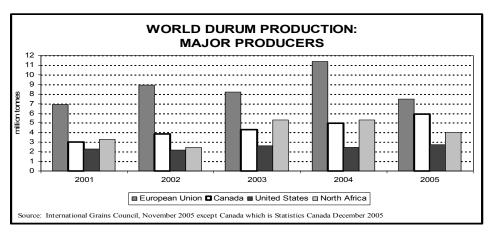
Production Considerations

The best quality durum is produced in regions having a relatively dry climate, with hot days and cool nights during the growing

season. Durum wheat also yields relatively well under dry conditions, compared to many alternative crops. Durum produced under higher moisture conditions tends to have a low HVK count, and sprouting and fungal diseases are also more common. Due to its development under a dry climate. durum has little natural resistance to these downgrading factors. Durum production and consumption was historically concentrated in the hot dry regions around the Mediterranean Sea. North Africa, southern Europe, Turkey, and Syria remain major durum producing regions, but production has expanded into North America, where a suitable climate is found in the major growing regions of western North Dakota and Montana in the US, and southern Saskatchewan and Alberta in Canada.

World Situation and Outlook

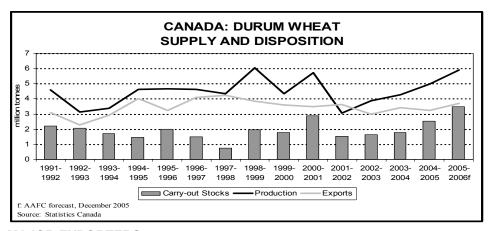
World durum production for 2005-2006 is estimated at 35.9 million tonnes (Mt)1, an 11% decrease from 2004-2005. However, major exporter² carry-in stocks have almost doubled, to 5.3 Mt, the highest in more than a decade. As a result, supplies in the three major exporting countries are unchanged at 21.5 Mt, which is 2.1 Mt above the 10-year average. The decrease in production for 2005-2006 is mainly the result of smaller crops in the European Union (EU), Algeria and Morocco, with Canadian and US production increasing. World durum usage in 2005-2006 is projected to be less than production, so that major exporter durum stocks are forecast to rise by a further 10%, to 5.9 Mt, 45% above the 10-year average. This has placed significant downward pressure on world durum prices.



International Grains Council November 2005 except Canada which is Statistics Canada December 2005

² Canada, United States and European Union





MAJOR EXPORTERS

CANADA

Supply

Western Canadian farmers planted 2.34 million hectares (Mha) of durum in 2005, 5% above the previous year and equal to the 10-year average. However, growing conditions were good, and abandonment was below normal, so that harvested area rose by 7%, to 2.30 Mha. With abovenormal moisture, yields on the harvested area were well above the 10-year average of 2.03 tonnes per hectare (t/ha) (30 bushels per acre {bu/ac}), with western Canadian durum yields in 2005 estimated by Statistics Canada at a record 2.58 t/ha (38 bu/ac). As a result, production rose by 19%, to 5.9 Mt. The higher production was compounded by sharply higher carry-in stocks, which rose by 41% to 2.5 Mt. As a result, supplies are 25% higher than for 2004-2005, at a record 8.4 Mt.

Quality

Due to excess rain at harvest, which resulted in sprouting, bleaching and mildew, the quality of the 2005 durum crop is reported to be well below normal, with less than half the crop grading No.2 Canada Western Amber Durum (CWAD) or higher, well below the 10-year average of almost 70%, although better than in 2004, when only about a third of the crop was of this quality. Protein content is near-normal, with No.1 and 2 CWAD averaging about 12.7% protein (13.5% moisture basis), similar to 2004 and the 10-year average.

Exports

Due to increased world export demand and increased supplies of the top quality grades of durum compared to 2004-2005, Canadian exports (including semolina) are forecast to rise by 15%, to 3.7 Mt, the highest since 1998-1999. With decreased production in North Africa, import demand from this major market has risen, and Canada has been in a position to take advantage of this market opportunity. Canadian exports to North

Africa are forecast at about 1.1 Mt in 2005-2006, up from 0.9 Mt in 2004-2005. Durum production in the EU is also down from 2004-2005, but large carry-in stocks will moderate the need for imports. Canadian durum exports to the EU are forecast to decline by about 20% from 2004-2005, to about 0.8 Mt (August-July). The US durum crop is 11% larger in 2005, and is of good quality, so that imports from Canada are expected to remain relatively unchanged at about 0.4 Mt in 2005-2006. Exports to South America are expected to increase slightly. Canada is expected to capture a 47% share of the world durum market in 2005-2006, up from 45% the previous year but below the 10-year average of 50%.

Carry-out Stocks

It is unlikely that the CWB will be able to accept deliveries of all durum offered by farmers in 2005-2006, and farm held carryout stocks are forecast to rise sharply compared to 2004-2005. The CWB has accepted only 50% of the durum offered under the Series A delivery contract, and it is expected that the acceptance of the Series B and C contracts will also be less than 100%, particularly for the lower grades. Farm-held stocks as of July 31, 2006 are forecast at a record 2.0 Mt, double that on July 31, 2005 and 4 times the 10-year average of 0.5 Mt. Total carry-out stocks are forecast to rise by almost 40% to a record 3.5 Mt.

UNITED STATES

Supply

North Dakota farmers increased their durum area by 13% in 2005, to 2.0 million acres (Mac), which accounted for 72% of total US durum area, down slightly from the 10-year average of 79%. Durum production has been shifting westward due to disease problems in eastern ND, and Montana area was 0.57 Mac in 2005, unchanged from 2004 but 21% of the total, versus the average of 13%. Total US seeded area for 2005 was up by 7%, at 2.7 Mac, but this remained well below the 10-year average of

3.3 Mac. The average yield in 2005 was slightly above-average at 37 bu/ac, but lower than in 2004. As a result, US production is up by 11% from 2004, at 100 million bushels (Mbu) (2.7 Mt), equal to the 10-year average. Carry-in stocks are 44% higher than for last year, resulting in a 19% increase in domestic supplies, to 138 Mbu (3.7 Mt), the highest since 2000-2001.

Trade and stocks

The United States Department of Agriculture (USDA) projects that US durum exports (June-May) will be 30 Mbu or 0.82 Mt (including products). As of December 1, 2005, US durum exports (including outstanding sales) were 0.48 Mt, up by 7% from the same date in 2004-2005. US carry-out stocks are projected to surge by over 50%, to 58 Mbu (1.6 Mt), the highest since 1990-1991, mirroring the movement in Canadian durum stocks.

EUROPEAN UNION

Supply

The EU-25 is the largest durum producing region in the world, with production concentrated in Italy, Spain, France, and Greece. However, it is also the largest consumer of durum, and since the early 1990s it has been a significant net importer of durum wheat. EU durum area decreased in 2005 due to changes to the support programs for durum under the Common Agricultural Policy (CAP), which have made it a less attractive crop to produce compared to alternative crops, and yields were below normal. As a result of these program changes and lower yields, EU production dropped by 34%, to 7.5 Mt. This has been partly offset by higher carry-in stocks, which have risen from 0.3 Mt to 1.8 Mt, the highest since 1993-1994. The combined impact has resulted in a 20% decrease in EU domestic durum supplies, to 9.3 Mt, equal to the 10year average.

Trade and stocks

The International Grains Council (IGC) forecasts a 28% increase in EU import requirements, to a record 2.3 Mt. The EU has imported an average of 0.7 Mt of durum from Canada over the past 5 years, an increase of 75% over the past decade. Imports from Canada reached a record 1.4 Mt in 2003-2004, for a 66% share of the EU market, before declining to 1.0 Mt (55% share) in 2004-2005, partly due to a shortage of top quality durum in Canada. For 2005-2006, this is forecast to decrease to about 0.8 Mt with Canada expected to lose market share in the EU to both the US and Australia as top quality supplies decline further. EU durum exports are expected to drop sharply, from 1.2 Mt in 2004-2005 to 0.5 Mt in 2005-2006 (including semolina).

THE EU-25 2003 COMMON AGRICULTURAL POLICY REFORM

The June 2003 CAP reforms introduced the "Single Payment Scheme" (SPS) that decouples aid payments beginning in 2005 and replaces many (but not all) of the former direct aids. There is provision for some product-specific aid payments to continue, where Member States believe there may be an undesirable reduction of production by a move to the SPS. They may apply a number of options, at a national or regional level, but only under well-defined conditions and within clear limits, and alongside continuing market stabilisation measures. These states may retain up to 40% of the supplementary durum wheat aid in order to continue the existing coupled per hectare payments up to those percentage levels. The aid supplement for durum wheat in traditional production zones will be paid independently from production (within national and regional base areas established for this production in the 6 producer countries). Member States may decide to keep 40% linked to production. The aid is fixed at €313/ha in 2004, €291/ha in 2005 and €285/ha from 2006 onwards, and is included in the SPS from 2005 onwards. The specific aid for other regions where durum wheat was supported will be phased out. The cuts will be implemented over 3 years, starting in 2004 (€93/ha in 2004, €46/ha in 2005 and zero for 2006 onwards). From 2004-2005, a quality premium of €40/hectare was introduced, subject to the use of certified seed of varieties recognized as being of high quality.

No EU export subsidies for durum are expected in 2005-2006. EU durum carry-out stocks are expected to fall by 55%, to 0.8 Mt.

OTHER PRODUCERS

The other major durum producing countries are Turkey, Syria, Kazakhstan, India, Australia, and Mexico.

Turkey is normally the third largest durum producer in the world, next to the EU and Canada, with production averaging 3.0 Mt over the past 5 years. Turkey is not a major exporter of durum wheat, shipping an average of about 0.1 Mt over the past 5 years. However, Turkey has a large pasta industry and is a major exporter of pasta. Small quantities of durum, averaging 20,000 tonnes a year, are imported to supplement domestic production, especially in years with a poor quality domestic crop. In 2005-2006, Turkish production is estimated at 2.9 Mt. with exports forecast at 0.2 Mt. Turkey is not a major Canadian market, tending to source its imports from the EU and the US.

Syrian durum production averages about 2.5 Mt, and this country has become a significant durum exporter, with 5-year average exports of 0.5 Mt and with 2005-2006 exports forecast at a record 0.8 Mt.

Mexican durum production has doubled over the past 10 years, from 0.5 Mt in the mid-1990's to 1.0 Mt over the past 5 years. Production is forecast at 1.1 Mt in 2005-2006, unchanged from the previous year. Some Mexican durum is exported, averaging 0.4 Mt over the past 5 years, with 2005-2006 exports forecast at 0.4 Mt.

Australian durum production has risen from virtually zero in 1990 to about 0.5 Mt today. Production for 2005-2006 is unchanged from 2004-2005 at 0.5 Mt. Australia has become a significant durum exporter, with 0.5 Mt forecast to be exported in 2005-2006, targeting the Italian market.

Kazakhstan durum production averages about 2.4 Mt annually, with 2.4 Mt produced in 2005-2006. Most Kazakhstan durum is consumed within the Former Soviet Union.

Indian durum production was 1.2 Mt in 2005-2006, unchanged from the previous year. Durum is used domestically for the production of atta flour. No Indian durum is expected to be exported, due to low quality and inadequate segregation in the handling system.

MAJOR IMPORTERS

North Africa

The four North African countries of Algeria, Morocco, Tunisia, and Libya constitute the largest durum import market in the world. Durum based foods are a cultural tradition in these countries, where most durum is consumed in the form of couscous, which consists of small grain-like balls of semolina steamed and prepared in a manner similar to rice. Traditional breads are also made with durum flour, particularly in Morocco. Domestic production is insufficient to meet requirements, and imports have averaged 3.0 Mt over the past 5 years, representing about 45% of annual consumption. Grain production in this region next to the Sahara Desert is largely dependent on winter rains, which are often unreliable, and as a result durum production is quite variable, ranging over the past decade from a high of 6.0 Mt

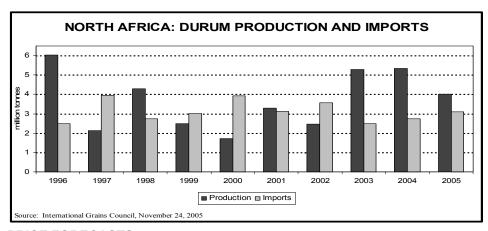
in 1996-1997 to a low of 1.7 Mt in 2000-2001. Production for 2005-2006 is estimated by the IGC at a near-average 4.0 Mt, down from 5.3 Mt the previous year. Imports are forecast to increase by 13% compared to 2004-2005, to 3.1 Mt. Canadian exports to North Africa are forecast at about 1.1 Mt in 2005-2006, up from 0.9 Mt in 2004-2005, maintaining a one-third share of total regional imports. As of October 31, 2005, Canadian exports to North Africa were 0.20 Mt, versus 0.32 Mt a year earlier.

Other Importers

The other major durum importing countries are Japan, Venezuela, Peru, and Chile. The South American countries are a potential growth market for Canadian durum. Pasta has traditionally been produced from common hard wheat in many of these countries. However, through market development work by the CWB, the Canadian Grain Commission, and the Canadian International Grains Institute, Canadian durum exports into South America have increased over the last decade, from less than 0.3 Mt in the early 1990s, to 0.5 Mt in the 2000 to 2004 period. Exports to this region were slightly below-normal in 2004-2005 due to poor quality, but Agriculture and Agri-Food Canada (AAFC) forecasts that South American imports of Canadian durum will increase slightly for 2005-2006, to about 0.6 Mt. Durum imports by Japan have been stable at about 0.2 Mt over the past decade, and are expected to remain near this level for 2005-2006. Canada supplies the bulk of the durum imported by the Japanese market.

COOKING COUSCOUS

The couscous sold in most western supermarkets has been pre-steamed and dried, and just requires adding a little boiling water to prepare it for consumption. Pre-steamed couscous takes less time to prepare than dried pasta or rice. The traditional North African method is to use a steamer (called a *couscoussière* in French). The base is a tall metal pot in which the meat and vegetables are cooked in a stew. On top of the base a steamer sits where the couscous is cooked, absorbing the flavours from the stew. In Algeria, Tunisia and Morocco, couscous is generally served with vegetables cooked in a spicy or mild broth, and some meat.



PRICE FORECASTS

Although world durum prices have been supported by the smaller EU and North African crops, this has been more than offset by larger crops in Canada and the US. The No.3 Hard Amber Durum (3 HAD) export price FOB Gulf is expected to average US\$180 per tonne (/t) in 2005-

COST OF DURUM IN 1 KILOGRAM (kg) OF PASTA

A 1 kg package of pasta currently contains about 25 cents worth of durum. This calculation is based on the assumptions that 1.0 kg of durum yields 0.74 kg of semolina, 1 kg of pasta can be produced from 1 kg of semolina, and that the price for No.1 CWAD durum in-store Thunder Bay is \$207/tonne or \$5.63/bu (as of December 9, 2005). Deducting transportation costs, this would equate to a return of about \$5/bu for a Saskatchewan farmer. A 1 kg package of pasta can be produced from about 1.35 kg of durum. As a bushel of durum weighs about 27 kg, 20 packages of pasta can be produced from one bushel, equal to \$0.25 per 1 kg package of pasta.

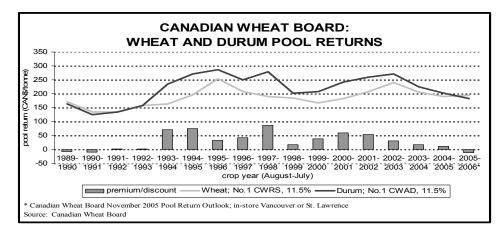
2006, 6% below the average of US\$192/t in 2004-2005 (August-July).

Canada

Canadian prices for durum wheat have been pressured by both the declining world price and the strengthening Canadian dollar. The dollar is forecast to average about US\$0.85 for 2005-2006, compared to US\$0.81 in 2004-2005. In Canadian dollars, the US 3 HAD Gulf price is forecast at CAN\$212/t, versus CAN\$238/t in 2004-2005, an 11% decline. The CWB 2005-2006 November Pool Return Outlook (PRO) for No.1 CWAD with 11.5% protein is \$183/t in-store Vancouver/St. Lawrence, 9% lower than in 2004-2005. A discount of \$11/t to No.1 CWRS 11.5% is forecast, versus a premium of \$11/t the previous crop year. A western Canadian average on-farm price of about \$136/t for No.1 CWAD 11.5% is expected, compared to \$155/t in 2004-2005.

OUTLOOK FOR 2006-2007

The outlook for 2006-2007 is very tentative at this time, as the majority of the world durum crop is spring seeded, so that seeded areas will not be known until about June, 2006. In both Canada and the US, durum area is expected to decline, due to low



prices in 2005-2006 and burdensome stock levels. However, durum producers often do not react significantly to current market conditions, as the crop stores well and significant premiums over non-durum wheat are expected to return in the future. Therefore, the declines are not expected to be large. In the EU, area is expected to remain near the below-average 2005 level, due to the CAP reforms, but with a return to normal yields, a small increase in production is possible. In North Africa, a normal durum crop is currently expected. AAFC is projecting a small decline in total world durum production for 2006-2007, but exportable supplies are expected to be relatively unchanged due to large exporter carry-in stocks. A small decline in exporter carry-out stocks is projected, which may provide some price support. However, the continuing large supplies make any large price rally unlikely unless production problems are experienced in a major producing region.

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