

# Bi-weekly Bulletin

December 5, 2007 Volume 20 Number 18

# **DURUM WHEAT: 2007-2008 SITUATION AND OUTLOOK**

The price of durum wheat has risen substantially in 2007-2008 due to tight supplies in the major durum exporting countries (Canada, the European Union (EU), and the US) and carry-out stocks are expected to fall to the lowest level since 1997-1998. However, in Canada, the exportable supply is relatively high which has increased the demand for Canadian durum and led to record high CWB pooled returns. The premium for durum relative to non-durum is expected to reach a record level. This issue of the *Bi-weekly Bulletin* examines the situation and outlook for durum wheat.

Durum wheat (Triticum durum) has unique characteristics which make it a "specialty wheat" in world wheat marketscia. 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. The substitutability of common wheat (t. aestivum) for durum wheat is therefore limited and durum is not suitable for many of the products produced from non-durum wheat. Durum flour is called semolina and is used to produce pasta and couscous, a staple food in North Africa. Couscous consists of small grain-like balls of semolina steamed and prepared in a manner similar to rice.

# **Demand Considerations**

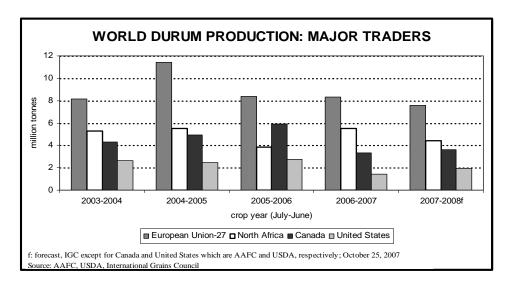
Durum pasta maintains a firm texture when cooked, and its natural amber colour is associated with good quality pasta. It should be noted that Asianstyle noodles are made from common wheat, not durum. In Europe and North America, pasta products (spaghetti, macaroni, etc.) are generally produced exclusively 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 non-durum wheat. A slight increase in 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.

# **Agronomics**

The best quality durum is produced in regions which have 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. In Canada, this area is found in southern Saskatchewan and Alberta. In the US, this area includes western North Dakota and Montana.





#### **SUPPLY**

#### World

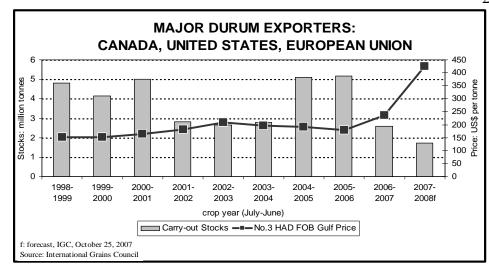
World durum production for 2007-2008 is estimated at 33.1 million tonnes (Mt)<sup>1</sup>, marginally below 2006-2007. In addition, major exporter carry-in stocks have fallen by over 50%, to 2.3 Mt. As a result, supplies in the three major exporting countries have fallen for the third consecutive year to 15.6 Mt, which is well below the 10-year average. The decrease in production for 2007-2008 is mainly the result of smaller crops in the EU and Morocco which have more than offset the increased production in Canada and the US. World durum use in 2007-2008 is projected to be higher than production, so that major exporter durum stocks are forecast to fall by a further 26%, to 1.7 Mt, over 50% below the 10-year average and the lowest recorded in modern times. This is expected to continue to provide significant support for world durum prices throughout the remainder of the 2007-2008 crop year.

#### **European Union**

The EU-27 is the largest durum producer and consumer in the world. Production is concentrated in Italy, Spain, France, and Greece. Durum production in the EU is also projected to be down from 2006-2007 and lower carry-in stocks will increase the need for imports. Since 1995-1996 it has been a significant net importer of durum wheat. EU durum area decreased by 0.6 Mha over the past two crop years 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 fell. For 2007-2008, EU durum production is forecast at 7.6 Mt, slightly lower than last year. This, combined with lower carry-in stocks, is expected to result in lower EU domestic durum supplies, at 8.2 Mt, below the 10-year average.

# Canada

Western Canadian farmers planted 1.95 million hectares (Mha) of durum in 2007, 27% above the previous year but still below the 10-year average. Harvested area increased by 26%, to



1.93 Mha. Yields were below the 10-year average of 2.09 tonnes per hectare (t/ha) (31 bushels per acre {bu/ac}), with western Canadian durum yields in 2007 estimated by Statistics Canada at 1.87 t/ha (28 bu/ac). As a result, production rose by only 8%, to 3.6 Mt. Increased production has been more than offset by lower carry-in stocks, which fell by 62% to 1.2 Mt. As a result, supplies are 27% lower than for 2006-2007, at 4.8 Mt.

# **United States**

Source: Statistics Canada

North Dakota farmers increased their durum area by 16% in 2007, to 1.5 million acres (Mac), which accounted for 70% of total US durum area, down from the 10-year average of 77%. Durum production has been shifting westward due to disease problems in

eastern North Dakota, and Montana area was 0.48 Mac in 2007, an increase of 20% from 2006. Total US seeded area for 2007 was up by 16%, at 2.1 Mac, but this remained well below the 10-year average of 3.1 Mac. The average yield in 2007 is estimated to be above average at 36 bu/ac. As a result, US production increased by 36% from 2006, to 72 million bushels (Mbu) (2.0 Mt), but remain well below the 10-year average. Carry-in stocks are much lower than last year, resulting in only a small increase in domestic supplies, to 128 Mbu (3.5 Mt).

## **North Africa**

Grain production in this region, next to the Sahara Desert, is largely dependent on winter rains, which are often unpredictable. As a result, durum production has been guite variable over

the past decade ranging from a high of 5.6 Mt in 1996-1997 to a low of 1.7 Mt in 2000-2001. Production for 2007-2008 is estimated by the IGC at 4.4 Mt, down from 5.5 Mt the previous year.

# **Other Producers**

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

Turkey is the third largest durum producer in the world, next to the EU and Canada, with production averaging 3.1 Mt over the past 5 years. In 2007-2008, durum production in Turkey is projected at 2.7 Mt.

CANADA: DURUM WHEAT SUPPLY AND DISPOSITION			
crop year	2005	2006	2007
(August –July)	-2006	-2007	-2008f
Harvested Area (kha)	1,706	1,738	1,934
Yield (t/ha)	3.467	1.925	1.869
	million tonnes		
Carry-in stocks	2,487	3,256	1,232
Production	5,915	3,346	3,614
Imports	4	1	1
Total Supply	8,406	6,603	4,847
Total Exports	4,273	4,478	3,150
Total Domestic Use	877	893	797
Total Use	5,150	5,371	3,947
Carry-out Stocks	3,256	1,232	900
f: forecast, AAFC, November, 2007			

<sup>&</sup>lt;sup>1</sup> International Grains Council, October, 2007 except Canada which is AAFC, November, 2007 and US which is USDA October, 2007

**Syria** produces about 2.5 Mt of durum annually, however, for 2007-2008, production is expected to fall to 1.8 Mt.

Durum production in **Mexico** has doubled over the past 10 years, from 0.5 Mt in the mid-1990s to 1.0 Mt over the past 5 years. Production is forecast at 1.2 Mt in 2007-2008, unchanged from the previous year.

Durum production in **Australia** has risen from virtually zero in 1990. Production for 2007-2008 continues to be burdened as Australia moves through two consecutive drought years which have limited production to 0.2 Mt and 0.4 Mt, in 2006-2007 and 2007-2008, respectively.

Durum production in **Kazakhstan** averages about 2.5 Mt annually and is forecast at 3.0 Mt in 2007-2008. Most Kazakhstan durum is consumed within the Former Soviet Union.

Durum production in **India** is projected at 1.1 Mt in 2007-2008, unchanged from the previous year. Durum is used domestically for the production of atta flour. Durum is not exported, due to low quality and inadequate segregation in the handling system.

#### **TRADE**

World trade in durum is expected to decrease from 7 Mt in 2006-2007 to 6 Mt for 2007-2008.

# **Exporters**

# **European Union**

EU durum exports are expected to fall by 33% to 0.8 Mt in 2007-2008 (including semolina). The majority of EU durum is exported to North Africa. No EU export subsidies for durum are expected in 2007-2008. The IGC forecasts EU import requirements at 1.8 Mt, up marginally from last year.

# **United States**

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 the middle of October, 2007, US durum exports (including outstanding sales) were 0.8 Mt, well ahead of the same date in 2006-2007. However, nearly all of the exportable US durum supply has been sold and it is highly

unlikely that this export pace will continue.

#### Canada

Due to reduced world import demand and reduced supplies compared to 2006-2007, Canadian exports (including semolina) are forecast to fall by 30%, to 3.2 Mt. Despite decreased production in North Africa, import demand from this major market is currently forecast to fall marginally. Canada is unlikely to maintain its share in this market due to lower exportable supplies. Canadian exports to North Africa are forecast at about 1.0 Mt in 2007-2008, down marginally from 2006-2007. Canadian durum exports to the EU are forecast to be relatively unchanged at about 1.0 Mt (August-July).

Exports to the US from Canada are forecast by the International Grains Council (IGC) to decline by 19%. Exports to South America are also expected to decrease. Canada is expected to capture a 55% share of the world durum market in 2007-2008, down from 63% the previous year but above the 10-year average.

The EU has imported an average of 1.0 Mt of durum from Canada over the past 5 years, an increase of 30% over the past decade. Imports from Canada reached a record 1.4 Mt in 2003-2004, for a 66% share of the EU market. For 2007-2008, EU imports from Canada are forecast to be unchanged at about 1.0 Mt with Canada expected to lose market share in the EU to the US as top quality supplies decline further.

# Other Exporters

Turkey is not a major exporter of durum wheat, exporting 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. About 20,000 tonnes of durum a year are imported to supplement domestic production. Turkey is not a major Canadian market, sourcing its imports from the EU.

**Syria** has become a significant durum exporter. The 5-year average is 0.4 Mt, with 2007-2008 exports forecast at 0.1 Mt, compared to 0.3 Mt in 2006-2007.

**Mexico** has been averaging 0.5 Mt in durum exports over the past 5 years. For 2007-2008, exports are forecast at 0.4 Mt, down marginally from last year.

For 2007-2008, durum exports for **Australia** are forecast to be limited, to 0.1 Mt, targeting the Italian market.

#### **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 as couscous. Traditional breads are also made with durum flour, particularly in Morocco.

Domestic production is insufficient to meet requirements, and imports have averaged 2.9 Mt over the past 5 years, representing nearly 40% of annual consumption. Imports are forecast to decrease by 22% compared to 2006-2007, to 2.1 Mt. This is largely due to high durum prices, which have suppressed imports.

# **Other Importers**

The other major durum importing countries are Japan, Venezuela, Peru, and Chile. The South American countries have been a consistent 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 5 years. South American imports of Canadian durum are forecast by Agriculture and Agri-Food Canada to decline slightly for 2007-2008, to about 0.5 Mt.

Durum imports by Japan have been stable at about 0.2 Mt over the past decade. Canada supplies the bulk of the durum imported by Japan.

# **CARRY-OUT STOCKS**

# Canada

It is likely that the CWB will be able to accept deliveries of all durum offered by farmers in 2007-2008, and, as a result, farm held carry-out stocks are forecast to fall significantly lower than the record high of 1.6 Mt in 2005-2006. Total carry-out stocks, farm held and commercial, are forecast to fall by 27% to 0.9 Mt, the lowest since 1997-1998.

#### **United States**

US carry-out stocks are projected to fall marginally to 19 Mbu (0.5 Mt), the lowest in modern times, mirroring the movement in Canadian durum stocks.

#### **European Union**

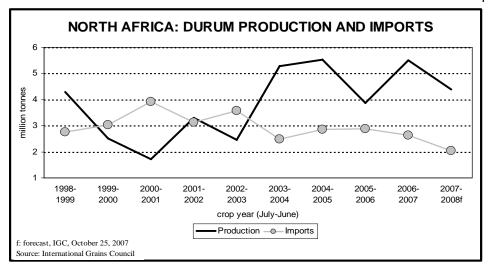
EU durum carry-out stocks are expected to fall marginally to 0.5 Mt, the lowest since 2003-2004.

# **PRICES**

World durum prices have been supported by forecasts of modern day record low carry-out stocks for the three major exporters and drought in Australia for the second consecutive year. The No.3 Hard Amber Durum (3 HAD) export price FOB Gulf is expected to average US\$425 per tonne (/t) in 2007-2008.

#### Canada

Canadian pooled returns for durum wheat have been supported by tight world durum supplies but have been pressured by the strong Canadian dollar. The US 3 HAD Gulf price is forecast at CAN\$425/t, versus CAN\$260/t in 2006-2007, a 63% increase. The CWB 2007-2008 November Pool Return Outlook (PRO) for No.1 CWAD with 11.5% protein is CAN\$458/t in-store Vancouver/St. Lawrence, more than twice the final price in 2006-2007. A record premium of CAN\$174/t to No.1 CWRS 11.5% is forecast, versus a premium of CAN\$13/t the previous crop year. A record western Canadian average on-farm price of CAN\$408/t for



No.1 CWAD 11.5% is expected compared to CAN\$167/t in 2006-2007.

# **OUTLOOK FOR 2008-2009**

For 2008-2009, world production is expected to increase by 13% as producers react to record returns in 2007-2008, especially in Canada and the US. In the EU-27, high durum prices and the policy change to reduce the obligatory set-aside area to 0% in 2008 are likely to result in a larger durum area. However, the increase will be limited by competition from other crops, such as rapeseed and other bio-fuel crops. Due to low world carry-in stocks, the world supply of durum is forecast to increase by only about 4%.

Due to increased durum production in the three major exporters', world durum prices are be expected to fall sharply from 2007-2008. However, this will be constrained by low carry-in stocks and strong demand.

For more information,please contact:
Bobby Morgan,
Market Analyst
Phone: (204) 984-0680
E-mail: morganb@agr.gc.ca

© Her Majesty the Queen in Right of Canada, 2007

# Electronic version available at www.agr.gc.ca/mad-dam/

ISSN 1207-621X AAFC No. 2081/E

Bi-weekly Bulletin is published by the:
Market Analysis Division,
Research & Analysis Directorate
Strategic Policy Branch
Agriculture and Agri-Food Canada.
500-303 Main Street

Winnipeg, Manitoba, Canada R3C 3G7 Telephone: (204) 983-8473 Fax: (204) 983-5524

A/ Executive Director: Patti Miller Chief: Fred Oleson

To receive a free e-mail subscription to Bi-weekly Bulletin, please send your request to bulletin@agr.gc.ca.

Issued also in French under title: *Le Bulletin bimensuel*ISSN 1207-6228
AAFC No. 2081/F

