



International

Wheat and Durum Market Analysis

Executive Summary for:

Cereals Canada and the Canadian International Grains Institute
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Executive Summary

The objective of this report is to understand the trends in global wheat demand to identify strategies with which to stimulate demand for Canadian wheat.

Canada Western Red Spring (CWRS)

- Is a high protein wheat which accounts for three quarters of common wheat exports.
- Its cleanliness, consistency between shipments and protein content and quality make it very well adapted to the production of high volume industrial bread. In addition, it is used in high quality noodle production in Japan.
- In these uses it is difficult to substitute CWRS without reducing the quality of the end product and as a result, Canada is able to export CWRS to markets where it cannot compete on price due to the high freight rates, such as Asia.
- In order to maintain these markets, the first priority for Canadian wheat must be to uphold the quality and reputation of CWRS.

Canada Prairie Spring Red (CPSR)

- Is a medium protein wheat which is higher yielding than CWRS.
- CPSR is highly regarded by millers, particularly in Latin America. However, at present it only accounts for around 3.5% of common wheat exports. The small volumes of exports mean that they are reluctant to rely on CPSR.
- As there are no specific end uses which are reliant on CPSR, it competes with US medium protein wheat, such as Hard Red Winter (HRW) on price. In this competition, the US has a substantial advantage through its barge system which reduces its internal freight costs by around \$30 compared with Canadian rail.
- Encouraging CPSR could, in addition, risk cannibalising existing CWRS sales with cheaper wheat.

Canada Western Red Winter (CWRW) and Canada Eastern Red Winter (CERW)

- CWRW and CERW are classes of winter wheat. Winter wheat production has increased but is almost exclusively consumed domestically. The small volumes of exports and their variability due to winterkill are the main concerns for importers.
- As with CPSR, winter wheat suffers from having to compete on price with US HRW. Growing production is likely to have to find a market in Canada.

Canada Western Amber Durum (CWAD)

- Durum wheat is used in pasta and couscous production whose end-product quality depends greatly on its functional properties.
- Demand is heavily concentrated in two regions: the EU, predominantly for pasta use and Middle East North Africa (MENA) mostly for use in couscous. Canada is the leading exporter of durum wheat and its exports are of a high quality enabling it to compete in these markets despite a freight disadvantage.
- As with CWRS, the first priority for CWAD must be to uphold its quality and reputation. In addition, growing yields should allow market share to expand.

Global growth in demand

In most regions per capita consumption of durum and common wheat is stagnant with consumption growth driven by population growth. However, because consumption has grown most rapidly in regions which are less well suited to the production of wheat, the trade in wheat has increased slightly more rapidly than production.

For *durum* wheat, the growth is concentrated almost entirely in North Africa. For *common* wheat, growth in imports has been particularly impressive in Africa, the Middle East and South East Asia. Taken together, these three regions now account for over half of global imports. Unsurprisingly, these are also the regions with the fastest population growth.

This shifting balance of demand is a concern for Canada, as these are not the markets in which Canadian wheat is currently competitive. By contrast the markets in which Canada is particularly competitive, principally North America and East Asia, are stagnant.

Wheat quality factors

Among all the attributes of wheat, the most important is its protein content and quality. It is the extensibility and elasticity of the gluten in wheat that both sets it apart from other grains and is the single most distinguishing feature in comparing individual classes of wheat. Higher protein wheat is predominantly used for high volume breads and alkaline noodles. As the protein content and quality of the wheat classes decreases they become better suited to medium volume breads, non-alkaline noodles, flat bread and finally cakes, biscuits and other confectionary products.

In most cases different classes of wheat from different countries are blended together by millers to achieve a consistent flour profile, at minimal cost, which meets the specific characteristics required by local bakers. Most end users therefore are not usually aware of the origin of the wheat used to produce their flour and the miller is the main customer for wheat.

From a miller's perspective, outside of the protein content and quality, the test weight, consistency between shipments and cleanliness of the wheat are the defining quality factors. Millers did not anticipate any changes to these requirements, due to shifts in milling or processing technologies.

Characteristics of Canadian Wheat

Canadian wheat exports are concentrated in one high protein class of wheat: Canada Western Red Spring (CWRS) accounts for over three quarters of common wheat exports. CWRS possesses superior protein content and quality, consistency and cleanliness compared to wheat from rival origins. Canada is also the main source of high quality durum through exports of Canada Western Amber Durum (CWAD). A detailed grading system, varietal registration system and the assurances provided by the Canadian Grain Commission, who monitor outgoing shipments, ensures that the Canadian brand is highly regarded by millers. These characteristics of Canadian wheat are both a source of strength and weakness for Canada.

CWRS and CWAD are tailored towards the production of specific products in whose use their functional properties give them a competitive advantage. In the case of CWRS, it is used for high volume industrial bread production. In addition, to its protein content and quality, consistency and cleanliness, this use is due to the fact that CWRS has a better balance between gluten extensibility and strength compared to other classes of high protein wheat. In addition, in Japan low extraction CWRS is used in noodle production. CWAD is used in pasta and couscous production whose end-product quality depends greatly on its yellow colour,

percent of hard vitreous kernels (HVK) and protein content and quality. Because CWRS and CWAD are very well suited to use in specific products in which they cannot be easily substituted, they can enter markets in which Canada faces a freight disadvantage. In order to preserve these markets, the first priority for Canadian wheat must be to maintain its quality and reputation.

However, because of the dominance of CWRS, Canadian wheat typically services a more limited range of products than its competitors. Most common wheat is used for a wide variety of different products which it makes it impossible to target wheat for narrowly defined segments. This makes stimulating demand in new markets more difficult for CWRS. By contrast, the US exports a full range of protein strength wheat and is therefore able to take advantage of growth in all markets.

Target markets for Canadian wheat

It is easier to stimulate demand in a growing market. While consumption growth is fastest in Africa, the Middle East and South East Asia, many of these regions are not attractive to Canada based on a combination of the type of wheat products they consume and their location.

- The **Middle East** and **North Africa** are growing at the fastest rate, but do not present any opportunities due to their preference for flat breads which use low protein wheat. In addition, they are well served by their proximity to exports of low protein EU and Black Sea wheat.
- Demand in **South East Asia** is also growing quickly, but Canada faces strong competition from Australia which has specialised in producing wheat varieties adapted to their noodle market. Canada is not well suited to the production of these types of wheat and faces a strong freight disadvantage. As a result, while Canada is able to export CWRS to South East Asia for use in high volume bread production, there are few other opportunities.

Our analysis therefore suggests that **Latin America** and **West Africa** stand out as regions which produce the type of products that can benefit from Canadian wheat classes, to which Canada has no major freight disadvantage and which, in the case of West Africa, are growing. In both of these markets Canada's major competitor is the US.

There are two problems with these markets:

- First, Canada already accounts for between 80-90% of high protein wheat imports into Latin America and West Africa. Therefore, at first glance, this market would appear to be saturated.
- Second, unlike millers in East Asia and South East Asia who are willing to pay a premium for the cleanliness, consistency and high protein of Canadian wheat, in Latin America and West Africa millers are less focused on quality and more on price.

Strategies for improving Canadian wheat exports

In order to encourage exports of Canadian wheat into these growing markets, two strategies present themselves.

One way to expand the available market opportunities may be to promote a medium protein wheat class. At present medium protein content wheat such as Canada Prairie Spring Red (CPSR) or Canada Western Red Winter (CWRW) account for a negligible share of exports.

Responses from interviewees suggest that these classes are highly regarded by importing millers, particularly in Latin America. They are also higher yielding, potentially therefore increasing revenue for Canadian wheat farmers.

However, in the medium protein content markets Canadian wheat commands little, if any, premium over competing origins. Canada would therefore have to compete effectively on price, particularly in price sensitive markets such as West Africa. In this competition, the US has a strong advantage through the US Gulf barge system which saves approximately US\$30 per tonne on freight compared with Canadian rail. This means Canada cannot compete on price.

In addition, to compete on price risks damaging the Canadian brand. It could also accidentally cannibalise existing sales of CWRS with cheaper wheat. If end users find that they can use CPSR wheat and still meet specifications, but not pay the full premium for CWRS, then Canada will have only achieved slightly greater volumes of sales but at lower prices.

The second is to find ways of increasing the use of CWRS as a blending wheat. We believe that Canada should focus its efforts on bifurcating the world wheat market rather than trying to capture the middle ground. In this strategy Canada will benefit from increasing supplies of cheaper wheat from the Black Sea region and EU. Canada therefore can increase the demand for CWRS in emerging destinations by encouraging millers to meet their specifications by combining cheaper wheat from other origins with Canadian wheat.

In order to encourage this process, the Canadian wheat industry should be looking at promoting Canadian wheat both to governments and millers in Latin America and West Africa. At present US Wheat Associates are very active in these emerging regions. Canada must compete by providing advice on trade negotiations and technical support to millers, to encourage the use of CWRS for blending in place of US medium protein content wheat.