

Prairie Grain Portal

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China Wheat Import Prospects

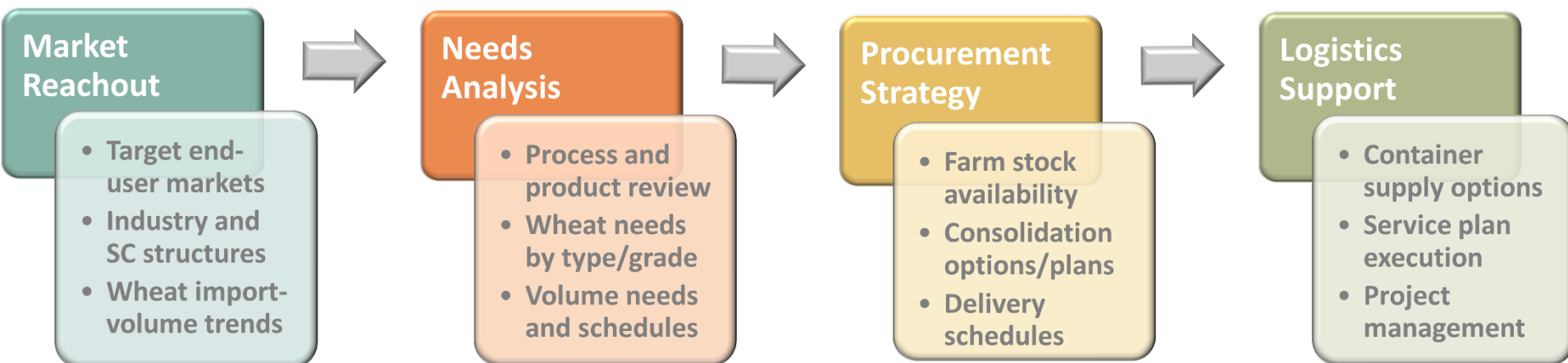
Virtues of Canadian Wheat

- We are the world's 6th largest wheat producer, but since our domestic needs are modest, we export 75% of our output, which makes us the 2nd largest wheat-exporter – a rank we share with the US behind Russia.
- More than volume, however, we take pride in the varieties of wheat we grow and their quality, classified and graded meticulously to achieve specific end-use attributes in milling, processing, baking, or cooking.
- Rather than bulk-trades, we focus only on containerized exports, specific varieties of wheat shipped directly from production-sources to overseas processing-facilities, with crop-quality intact and identity-preserved.



Our platform's mission

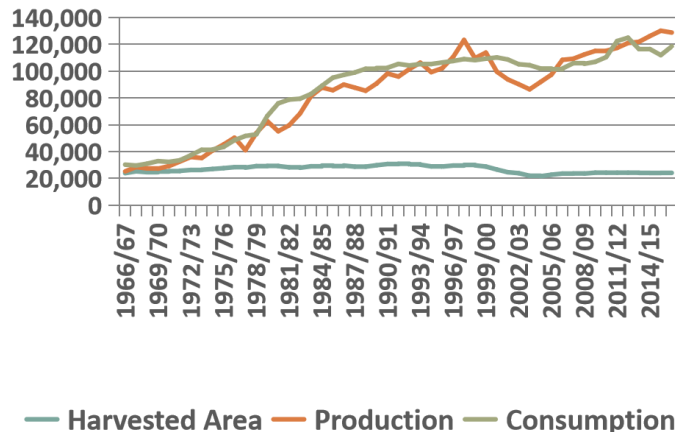
- Prairies have a huge variety of high-grade wheat available for export. Instead of bulk-systems, producers are eager to sell direct to overseas buyers, end-users of wheat, like they already do across North America.
- Overseas buyers have little visibility into the Prairies to know what is available to meet their specific processing needs. Also, they are deterred by procurement, consolidation, servicing, and shipping challenges.
- Our mission is to reach out to overseas buyers, understand their needs, prepare procurement/consolidation plans, and make servicing/shipping arrangements to deliver what they need to their doorsteps in containers.



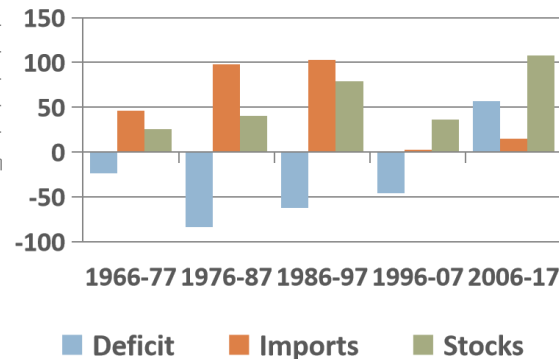
China's global position

- In 50 years, China increased output more than 6-fold to 140 MT/year on about the same harvest-area to become world's largest wheat producer, now with no food-insecurity fears, in both staple-crops, wheat and rice.
- During the 1st reform-decade there was a significant wheat-deficit, which continued to shrink into the 2nd and 3rd decades, but imports continued into the new century to meet consumption needs and build up reserves.
- By the turn of the 21st century self-sufficiency had been largely achieved, but imports continued, now with modest exports, again with the dual objectives of meeting market demand and shoring up reserve-stocks.

China's Wheat Profile
(Thousand ha or 000 tonnes)



Production-Imports-Stocks
Million Tonne



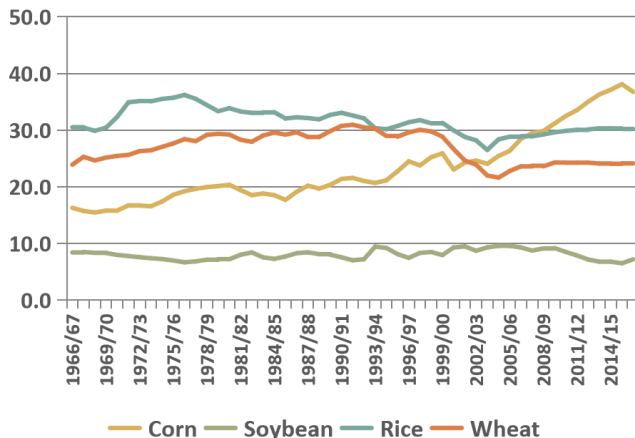
China's Wheat Trade
(Thousand tonne)



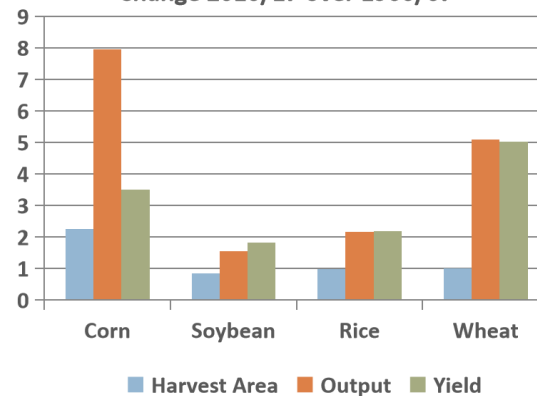
Phenomenal yield-increases

- At the beginning of the reform era yields were a mere 1 MT/ha. China has since caught up to the EU that has the highest yields at 5.3 MT/ha – by developing new seed-cultivars and improving farming methods.
- In comparison, yields in other major wheat growing regions are 4.1 MT/ha in Ukraine, 3.6 in Canada, 3.5 in US, 2.9 in Russia – thus, we can not expect China to achieve much higher yields in the coming years.
- Also, with 20% of the world population and only 8% of arable land, China has very little land for more cultivation – in the last 20 years only crop given more land was corn, 15 million-ha increase at expense of wheat.

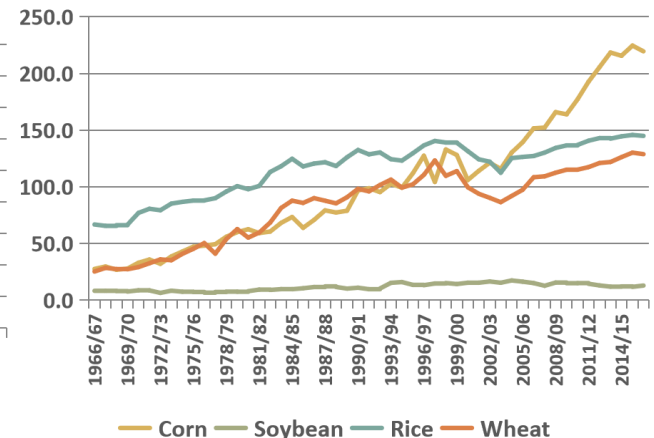
Harvested Area
Million Hectare



Change 2016/17 over 1966/67



Crop Production
Million Tonne



Flour milling capacity

- While some of the wheat output was diverted to animal-feed and other uses, lion's share, at the turn of the 21st century as much as 100-110 MT, had to be milled into flour before entering various consumption-chains.
- There was no shortage of milling capacity inherited from the collective era, thousands of small mills with total 250 MT capacity – quite primitive but adequate for flour required for staple foods like buns and noodles.
- Many of these mills had improved their processes but still producing large-particle flour with high-ash content. As in all sectors along the reform path, China needed a major leap forward in milling technology.



Low-end Wheat Chain



High-end Wheat Chain



Milling technology

- China's milling technology-revolution got underway in earnest 20-25 years ago, with highly modular and automated designs that could be assembled into mega-mills, with multiple 500-800 T/day capacity units.
- New technology improvements focused on extraction-rates, ash-control, energy-efficiency, as well as automated wheat-intake and output-control – particle-size-control to produce refined flour varieties for end-uses.
- These efforts gave rise to a new industry-cluster, including global leader Buhler with China operations, dozens of local equipment/control-system manufacturers, and several turn-key design-and-build companies.

Process Improvement

Auto cleaning, blending

Auto feeding rollermills

Mono-case plansifters

Enhanced purification



Quality Achievements

Roller chill length increase

Purifying width increase

Shifting surface increase

Flour extraction, ash control

New industry structure

- Milling industry in China is still in transition, new mega-mills being built but small primitive ones still operating, with overcapacity on both sides. Another trend is boutique-mills, small but with the latest technology.
- The 3 industry leaders dominate the market: privately-owned Wudeli, Singaporean-owned Yihai, and state-owned COFCO – Wudeli has double Ardent's capacity, the other two about the same capacity as Ardent.
- Overcapacity is not going away anytime soon but as new mills increase their utilization, small primitive mills will fade, or modernize to survive to serve local markets, like new boutique-mills do with specialty-flours.



Industry
Consolidation

New Modern Mills
Mega Flour Mills – 2000 T/day plus
Additional Capacity 20-30 MT/annum

Small Mill Closures
2000-3000 mills
Capacity Elimination – 75 MT

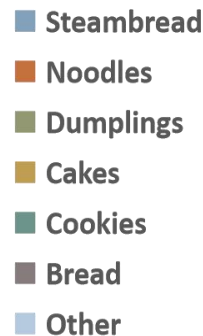
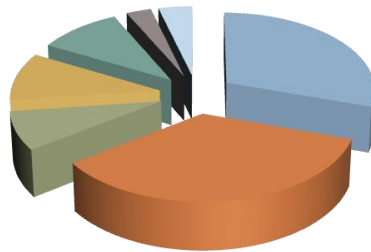
Medium Mill Closures
200-400 mills
Capacity elimination – 25 MT



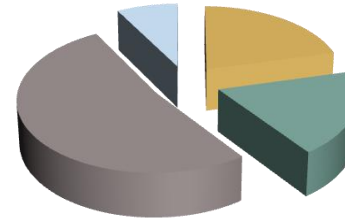
Wheat consumption trends

- Americans and Chinese consume roughly the same amount of wheat, 90-95 kg/capita/year, but both much less than other major grain-producers – EU, Ukraine, Russia, Canada, Australia consume 2.5-3.0 times more.
- Even if we compare just China and US, we see huge differences in how wheat-flour is used – lion' share for dumplings-noodles-steambreads in China, while even a larger share for breads-cookies-cakes in the US.
- We now see shifts in China's flour-use to western-style foods, changing the types of flour needed to meet market demand, while we can expect 10-20% growth in overall wheat-flour consumption in the coming years.

Wheat Flour Use - China



Wheat Flour Use - US



New culinary influences

- With growing affluence, Chinese are not abandoning their own culinary traditions but are increasingly turning to western-style foods that require different types of wheat-flour, in terms both grade and wheat-intake.
- The legend has it that Marco Polo introduced noodles to Italy, but now Chinese have taken to Italian food with a vengeance – pizza chains and Italian restaurants are spreading like wild-fire in all major urban areas.
- Similarly, consumption of all sorts of western-style pastries and breads is on the rise – bakery industry growing 15-20% a year with both domestic and foreign bakery-chains expanding their footprint across the country.



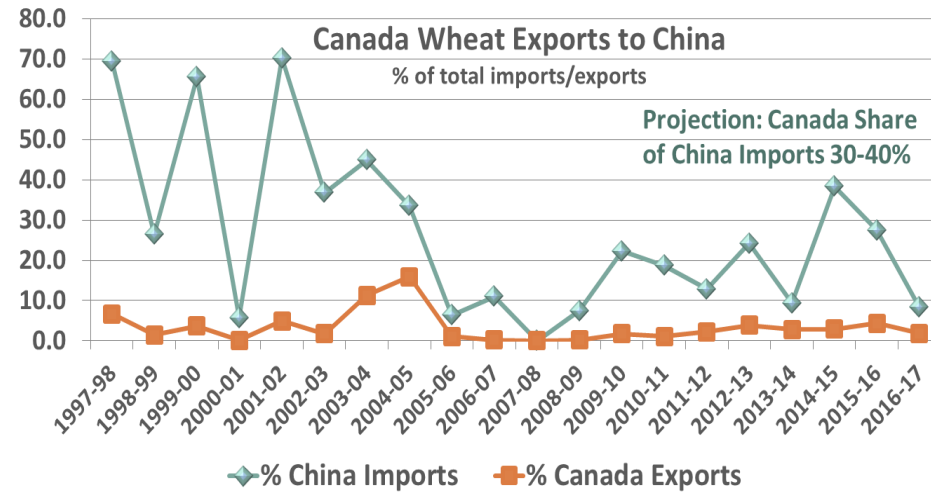
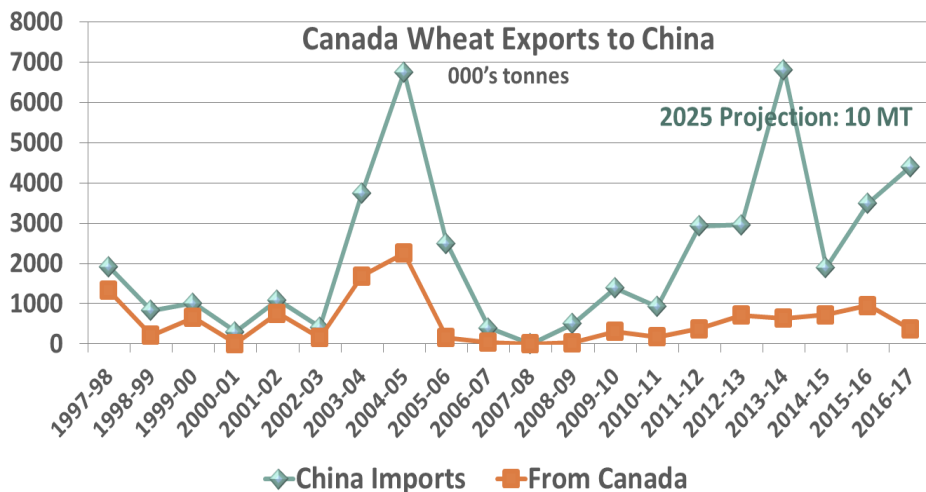
Wheat grades and varieties

- Modern milling technology is in place to produce any kind of flour in China, but with shifting culinary habits different wheat grades/varieties are required to achieve the desired end-use attributes in wheat-flour.
- Though China has achieved self-sufficiency and quality improvements in wheat, soil and weather conditions are not very conducive to growing certain varieties such as hard-red or durum that are in high demand.
- As more of these varieties are needed, driven by market demand, China has the option of exporting what is easier to grow domestically and import more of what is scarce – as it has been doing in recent years.



Canada-China wheat trades

- Canada led the way in normalizing relations with PRC and continued to be a major wheat supplier to China into the reform era – even later (mid-1990s to mid-2000s) supplied a large share of China’s wheat imports.
- Since early-2010s China has become our largest grain-export destination – wheat exports were overshadowed by canola, soybean, and barley, though they still represented a large share of China’s imports, 20-30%.
- Now we see an opportunity to put Canada-China wheat trades on a more strategic footing – supplying the wheat varieties China needs to meet changing flour-attributes, like hard-red, durum, as well as others.



A new approach

- Our mission is to position Canadian wheat exports to cater to China's changing flour needs driven by new culinary trends – such as the ones we noted, western style breads-pastries, pastas-pizzas, and others.
- To this end, we hope to position our specialty wheat varieties in China by targeting leading millers and processors through contract-sales channels – supplying what they need, delivered to their facilities in containers.
- Through our procurement efforts, we believe Canadian producers will get higher prices for their crops, while Chinese buyers still realize cost-savings by avoiding consolidation/distribution through bulk grain-trades.



Alternative models

- We can approach end-users, millers or processors, to determine their wheat needs, shoulder procurement/logistics challenges at the export-end, arrange for container-loads of what they need to their facilities.
- Given the wheat-import quota requirements in China, however, we may have to go through a designated importer holding the necessary quotas, but still procure for end-users and deliver to their facilities directly.
- If we must revert to the latter option, our role will not change, with end-users still realizing cost savings (less a small import-agency margin) and enjoy the quality/identity preservation benefits of container-deliveries.



Wudeli Flour Group

- Private Chinese company, with 5000 employees
- 35-40 mills with 60,000 T/day grind-capacity



Yihai Kerry

- Wilmar invested overseas Chinese enterprise
- 20-25 mills, 25,000-30,000 T/day grind-capacity



COFCO

- State owned, Fortune 150, leading agri-business
- 20-25 mills, 20,000-25,000 T/day grind-capacity



We are here to facilitate!

- We embarked on our initiative with a new “vision”: to save our grain exports from their captivity to bulk-systems and trade-interests, through new channels that serve our producers and overseas buyers alike.
- We do not trade, neither buy nor sell grains. We help buyers procure what they need, consolidate from multiple sources, and provide the logistics support to get them shipped to their doorsteps in containers.
- We are open to working with end-users (millers, processors, bakers, etc.) or designated importers whereby specific varieties/grades of wheat reach where they are needed, quality-intact and identity-preserved.

