# **Specialty Wheat Export Prospects**

We are following our last article on malting-barley with wheat export prospects. In Canada wheat is our oldest staple-crop and still the largest volume crop we grow and export; it accounts for about 40% of all grains and oilseeds that we produce and more than 50% of what we export. This crop-year we are expecting a harvest of 35 MT, making us the 5<sup>th</sup> largest producer (6<sup>th</sup> treating EU as one entity), and with a 25 MT surplus, 2<sup>nd</sup> in exports (3<sup>rd</sup> treating EU as one) behind Russia, ahead of the US.

In the last 150 years we made huge strides in agronomy and farming methods to achieve not only yield-increases but also crop-quality improvements. Moreover, by developing the finest classification and grading systems, coupled with rigorous sampling-testing programs, we deservedly acquired a stellar reputation as the prime source of quality wheat varieties around the world. Despite all these achievements at the production-end, however, we let our producers down in exporting wheat.

Under CWB's single-desk system, we were opening new markets and getting good value for what we had to export, leaving behind sufficient margins for producers. But the system had its limitations, holding back crop-diversification; limiting CWB's mandate to wheat and barley unleashed a shift into other crops, first to canola, and later pulses, both proving to be excellent value-propositions. These successes rallied support behind CWB's abolishment and for privatization of the entire grain-industry.

In due course, however, we had overlooked one shortcoming of our grain-systems, captivity of all our grain exports to bulk-trades, which privatization had left to a handful of grain-companies with too much market power over producers. Driven by a volume imperative through bulk-consolidation, these grain companies are not realizing the true value our quality exports deserve in global markets, diminishing our total export-proceeds; moreover, they are also squeezing producers' margins.

We believe the only way of getting rid of this dual-curse inflicted on both the grain economy at large and individual producers, is to interject more competition into grain-trades. Our remedy is opening direct-sales channels for overseas buyers to procure what they need from production-sources, like corporate-buyers from across North America do. To achieve this goal, we must shift away from bulk to containers, which will bring not only cost-savings but also help realize higher prices for all the crops we export, delivered with product-integrity intact to final destinations.

After a brief overview of our position on the global wheat scene, we extol the virtues of the wheat varieties we produce, classified and graded to highest standards in the world. Then we turn to the much-denied value-squeeze on what we export in bulk, and the narrow margins producers get from these bulk-trades. After presenting the value proposition behind direct-sales and containerized deliveries, we provide a case-study of wheat-exports to China, a much-neglected market opportunity to date. Finally, we provide an outline of our export initiatives aimed at Asia Pacific markets.

### Canada's position on the global wheat scene

The history of wheat in the wild, known as *einkorn*, goes back earlier but its cultivated form, *emmer*, like barley, can be traced to the *Fertile Crescent* in the Middle East 10<sup>th</sup> millennium BC. Evidence shows that wheat's spread followed a similar pattern as barley – across Europe reaching British Isles by 4000 BC and across Asia reaching China by 2500 BC. It would take a few more millennia for wheat to displace other coarse grains and become the primary source of food in Europe; into the 19<sup>th</sup> century, we would see the same happening across North America.

Wheat was introduced to Canada in the early 17<sup>th</sup> century, first grown in Nova Scotia, then in Quebec and Ontario, and by early 19<sup>th</sup> century also in Manitoba. In the 19<sup>th</sup> century, wheat had already become an export-crop, but weather was posing challenges – winter too cold to grow and arriving too early in the fall for crops to mature. The earlier *Red Fife* seeds, introduced in Ontario and soon spreading to the West, proved resilient but the breakthrough was *Marquis*, a more quickly maturing variety. By the early 1920s, our annual production volumes had reached 10 MT.

Wheat was prone to stem-rust, caused by an easily spreading fungus, which every few years was known to wipe out 2-3 MT of crop. Research through the 1920s came up with more resistant varieties; by 1935 *Thatcher* was introduced, believed to be the ultimate remedy, but in the early 1950s another epidemic wiped out 8 MT. The problem has since dissipated, but drought-fears prevailed. A bullet-proof solution in this regard was too much to expect, but significant improvements have been made in drought-resistant seeds, as we were pleased to see in last year's scary harvest.

In 1960 we had about 10 million hectares of land seeded with wheat; this peaked through the 1980s at over 14 million, but is now back down to 10 million. Total output, however, was up to 35 MT in 2020, 2.5 times higher than in 1960. There were, of course, fluctuations along the way, like severe droughts in 1988 and 2002, when output was as low as 16 MT. During last year's drought output was down to only 22 MT, 35% higher than the 2002-drought when about the same land area was harvested. Thus, there is clear evidence of significant yield increases, a result of more drought and disease resistant seeds as well as much improved farming methods – fertilizer-pesticide use, advanced machinery, and info-tech applications.



In 2020 global wheat production was 765 MT, much less than corn (1200 MT) but more than rice (510 MT). Canada's output (35 MT) represented less than 5% of the global total, but we still ranked 6<sup>th</sup> – behind China (134 MT), EU (127 MT), India (104 MT), Russia (74 MT), and US (50 MT). Behind us in the top-10 were Ukraine (28 MT), Pakistan (24 MT), Argentina (19 MT), and Australia (18 MT) – France and Germany would also be in these top national ranks but are reported as part of the EU total. With 613 MT, the top-10 wheat producers represented 80% of global production.

Among all grains grown around the world, wheat ranks 2<sup>nd</sup> in production-volume, but with almost 190 MT of annual exports it is 1<sup>st</sup> in trading-volume, representing one-third of all grain trades – followed by soybean in 2<sup>nd</sup> place with 150 MT and corn in 3<sup>rd</sup> with 140 MT. About 25% of all the wheat grown worldwide is exported, lower than soybean with a 40% export-to-production ratio, but higher than other crop-groupings, all in the 10-15% range – rice, corn, other coarse-grains, and oilseeds. Among top wheat-producers, Russia, US, Argentina, and Australia exported 50-55% of their output, Ukraine 64%, while Canada had the largest export-share at 74%.

In 2020 Russia ranked the top wheat-exporter with 37 MT. EU exported more but after adjusting for imports, its net-exports were less than Russia, ranking 2<sup>nd</sup> largest wheat-exporter. Within EU, largest wheat-exporters were France (20 MT), Germany (9 MT), and Poland (5 MT). US and Canada came 3<sup>rd</sup> and 4<sup>th</sup>, each with about 26 MT, followed by Ukraine (18 MT), Australia (10 MT), Argentina (10 MT), and Kazakhstan (5 MT). The other two in the top-10 exporters, Turkey and Mexico, both imported even more through other channels, thus were net importers. China and India, 1<sup>st</sup> and 3<sup>rd</sup> largest producers, still had to import modest volumes to meet their needs – the former still in a net export position, but the latter in a net import position.

When we look at the import side of the global wheat-trade ledger, we see a very different picture with a multitude of net-importers. In fact, other than the 8 net-exporters we cite above, all other countries around the world must import to meet their food needs as wheat is an essential dietary ingredient worldwide. Largest importers are Egypt and Indonesia, each importing 10-11 MT annually, followed by Brazil and Algeria 7-8 MT, India and Japan 5-6 MT. These leading importers take up about 50 MT, with the remaining 130-135 MT shared by the rest of the world, but each importing less than 5 MT annually to feed their respective populations.



### **Classification-systems and quality-assurance**

In 2020 Canada was the 6<sup>th</sup> largest wheat producer; by exporting 74% of its output, the highest share among all countries, it ranked the 4<sup>th</sup> largest exporter, behind Russia, EU, and with a thin margin the US. This coming year our export volume may exceed the US, and if we break EU down to its constituent parts, we could even rank as the 2<sup>nd</sup> largest exporter behind Russia. But there is more than just volume that distinguishes us from other exporters: the grades and quality of wheat we export.

As touched on earlier, we had initially struggled with growing wheat under harsh weather conditions but managed to come up with seed strains that matured early before the onset of winter. Even with limited winter growth (still less than 10% of our output) we managed to achieve respectable crop-yields in world standards. Into the 20<sup>th</sup> century efforts turned to battling stem and leaf rust but we managed to cultivate new seed varieties with improved disease and drought resistant traits.

In a land of private farms, owned by colonialists or settlers, the government had shouldered R&D in agriculture. *Department of Agriculture* dates to the time of *Confederation* in 1867. The *Dominion Experimental Farms* had been established the year before, where the founding director's son Sir Charles Saunders would develop the cultivator *Marquis* in 1903, distributed a few years later to become the statutory standard until 1987. With multiple branches and stations, *DEF* had also taken the lead in improving farming-methods – soil-tillage, crop-rotation, fertilizer-application, drainage-irrigation, farm-machinery, land-reclamation, and costing-guidelines.

At the turn of the century, all three provincial universities established across the region also started to play critical roles in agricultural-sciences – Saskatchewan had started as an agricultural college, while both Alberta and Manitoba had founding-colleges in agriculture. In time, they became centers-of-excellence, in research labs as well as in the fields, greatly advancing the cause of grain production. Still, *Agriculture and Agri-Food Canada* (AAFC) remains a sprawling ministry, its *Science and Technology Branch* alone with 20 R&D centers and 30 satellite research locations across the country – 2,200 employees and 400 research scientists under its wing.

Another agency under AAFC is the *Canadian Grain Commission* (CGC), which was formed in 1912 and continues to play crucial regulatory, licensing, and oversight roles in the grain sector. CGC, originally called Board of Grain Commissioners, functioned first along with the Board of Grain Supervisors through WW1 and after 1935 the *Canadian Wheat Board* (CWB), when all grain-sales, domestic and export, came under government control. Over the years, most policy debates focused on CWB, but CGC survived CWB's dismantling to carry out its own mandate.

With CWB out of the way, we tend to think of grains as freely grown and traded commodities, but they are part of the food-chain, thus subject to the same healthand-safety regulations as anything we eat. The entire production process, from seeding to harvesting to storage, are subject to regulations. Inspectors may not reside on farms, but farmers have long internalized rules, standards, and practices, and are often inspected to ensure full compliance. Regulations also extend to grain-handlers, with every piece of equipment subject to health-and-safety rules. Grain traders or exporters are also included in the regulatory-net, all licensed by the CGC.

As important as CGC's licensing and oversight responsibilities is its mandate to grade and classify grains. As part of crop-diversification efforts, every new domain was given its due attention, including canola, soybean, and pulses. But in the process, our largest volume staple, wheat, was not neglected. We upheld our stellar global reputation as the premier source of wheat, meticulously classified, graded, tested, and exported, with varieties to meet the needs of the most discerning importers.

Grain classification is not just a theoretical exercise based on agronomic traits, but a process driven by end-user requirements, in the case of wheat dictated by results achieved in flour-milling or food-processing. As stated by CGC:

Grades relate to a grain's end-use quality, meaning grades relate to how grain characteristics affect performance during processing (e.g. how much flour is produced during milling) or the quality of the end product (e.g. texture of cooked pasta) .....In addition to grade, transactions can be based on contract specifications to meet the customer's end-use requirements. Generally, producers are paid based on the grade of grain they deliver.

Over the years wheat classes evolved, and continue to do so, to meet the needs of end-users, and to guide wheat-growers to adapt to market trends accordingly. In addition to 5 milling-classes in Eastern Canada, there are 9 in Western Canada.



Class	Characteristics	End Uses
CNHR-Canada Northern Hard Red	Red spring wheat, medium to hard kernels, very good milling quality, medium gluten strength, 3 milling grades	Hearth breads, flat breads, steamed breads, noodles
CPSR-Canada Prairie Spring red	Red spring wheat, medium hard kernels, medium dough strength, 2 milling grades	Hearth breads, flat breads, steamed breads, noodles
CPSW-Canada Prairie Spring White	White spring wheat, medium dough strength, 2 milling grades	Flat breads, noodles, chapatis
CWAD-Canada Western Amber Durum	Durum wheat, high yield of semolina, excellent pasta making, 4 milling grades	Semolina, couscous
CWES-Canada Western Extra Strong	Hard red spring wheat, extra strong gluten, 2 milling grades	Ideal for blending, specialty products that need high gluten content
CWHWS-Canada Western Hard White Spring	Hard white spring wheat, superior milling quality producing flour with excellent color, 3 milling grades	Bread and noodle production
CWRS-Canada Western Red Spring	Hard red spring wheat, superior milling and baking quality, 3 milling grades, various guaranteed protein levels	High volume pan bread, alone or in blends with other wheat for hearth, bread, steamed bread, noodles, flat bread, common wheat pasta
CWRW-Canada Western Red Winter	Hard red winter wheat, very good milling quality, 3 milling grades	French breads, flat breads, steamed breads, noodles
CWSWS-Canada Western Soft White Spring	Soft white spring wheat, low protein content, 3 milling grades	Cookies, cakes, pastry, flat breads, noodles, steamed breads, chapatis

### Captivity to bulk-systems with low-margins

As we tried to convey above, Canada has one of the finest grain classification and grading systems, for all crops we grow, but particularly in the wheat-domain where we have a long history. These systems are the envy of the world and have been emulated or adopted by many other grain-growing countries, as well as in import-standards. The summary of the classes we provided above cannot possibly do justice to the level of detail involved, but hopefully confirms the diversity of what we produce, and the quality standards we achieve in everything we grow and export.

With its more than a century long history in this arena, CGC has every right to brag about its classification system and the crop-quality standards it helps ensure through very diligent grain grading and testing practices. But like policymakers at large and the government-agencies they run, CGC takes it for granted that *"producers are paid based on the grade of grain they deliver"* – as stated at the end of the paragraph we quoted above. This we maintain is a long-standing *"delusion"* in the grain industry and among its stakeholders with vested interests, particularly the grain-traders.

The value-proposition would hold if grain-markets were functioning competitively without structural impediments. During the long and highly politicized struggle to get rid of the CWB, all the attention was paid to the government-owned single-desk system, with the ultimate panacea seen as the privatization of the grain industry. Little if any attention was paid to the structure of the industry that would emerge, and its competitive implications from producers' perspective. In fact, little changed in the way grains are consolidated and exported to overseas through bulk-systems.

In many of our articles we try to bring attention to the virtues of direct sales, from producers to end-users. They impose the discipline to ensure that markets function competitively. In domestic wheat markets we saw this go into action with corporate buyers (millers or processors) setting up their procurement programs and competing among themselves after CWB's monopsony ended – what we had observed for other crops left outside the monopsony-net. Such practices cut out intermediaries from grain trades, unless they have some value to add, and ensure that producers get fair market value for all the different varieties and grades of wheat they produce.

Domestic markets, however, take up little more than a quarter of the wheat grown across the country. Even if we include transborder sales to the US in the same category, as these markets function under the same competitive discipline imposed through corporate-procurement channels, we still have 70% surplus from what we produce that we must export overseas. These exports are captive to bulk-systems controlled by a handful of grain-companies with little incentive to compete – thus, producers get lower prices than they do from domestic or transborder sales.

As to the origins of bulk-systems, we must look back in history, when wheat was bagged, loaded into boxcars, and transferred to vessels at nearest ports. Into the country-elevator era, wheat started to be consolidated, loaded into dedicated grain-

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cars, and transferred to vessels with bulk compartments – transition from break-bulk to bulk-shipping. In time, country-elevators got much larger, with wheat transported to coastal-terminals in unit-trains of hopper-cars and loaded on bulk-ships destined to export markets. In the hands of CWB, the system was expanded and streamlined, with CWB playing the role of a *logistics-master*, but with only a few assets of its own.

By the late 1990s most grain-industry assets across the Prairies were in the hands of producer-coops, while CWB's monopsony was expected to come to an end. Failing to see what the future held, coop-members (producers) voted to corporatize, paving the way for the merger of all provincial-coops under one roof. When CWB was abolished, wheat and other export-crops captive to bulk-trades fell into the hands of a private but highly concentrated industry – price-takers in the global arena but with enough market power to dictate prices on producers, thus squeezing their margins.

The captivity of wheat exports to bulk-systems has yet another drawback: limiting export-proceeds from wheat-trades. Highly invested in inland and coastal terminals, the custodians of bulk-systems are driven by volume, motivated to consolidate as much wheat as possible with little regard for class or grade differentiation. They have no interest in marketing wheat to end-users around the world to get higher prices – motivated to get as much wheat as possible on vessels at our own ports.

Often denied or ignored, but this in turn narrows the margins grain-companies offer for high-value wheat varieties, thus discourages product differentiation, our greatest competitive virtue in world markets. Despite the best grading-classification systems, and quality-assurance programs, we are not getting the value commensurate with all these virtues. Though we are known as the premier source of wheat, our exports are underperforming, while low-margins force producers to shift to other crops.

Since the ending of CWB's monopsony over wheat, harvested area has not changed, while volumes increased because of yield-increases, but neither the value of exports nor the margins producers realize has increased. Wheat remains our highest volume export crop, but down to only half of grain exports. From producers' perspective, rather than a preferred crop, wheat has become a "filler" between more valuable crops like canola and pulses, largely a rotational necessity. With narrowed price margins, there is little incentive to grow higher value wheat varieties like durum.



# Salvation: direct sales fulfilled in containers

We have covered the problems that come with the captivity of our grain-exports to bulk-systems in many of our past articles – holding back value-driven diversification and squeezing producer-margins. This has been most evident in wheat, our largest volume crop with the highest export-share. The core mission of our platform is to overcome this dual-curse inflicted on the grain-economy, by opening direct sales channels between overseas buyers and producers that can be fulfilled in containers, with point-to-point shipments from production-sources to processing-facilities.

Direct-sales channels have become standard practice in our domestic grain trades and even across the border to the US. They eliminate intermediaries from the trades, especially unnecessary consolidation or distribution functions, leaving more margins to be shared between producers and end-users. With multiple corporate buyers procuring from production sources, grain-markets function competitively, also providing incentive to producers to grow higher-value grades or varieties of wheat that millers or processors prefer and are willing to pay a premium for.

There is no reason for the same trading patterns not to take hold in overseas export trades. Naturally, truck or railcar deliveries cannot be deployed across oceans but there are containers to facilitate these trades in the same manner. In fact, there is a huge volume of containers returning empty to Asia from our west-coast ports, which can be deployed in grain-trades – in today's market, enough empty capacity to handle 5-6 MT of grain-exports. If more is needed, with no shortage of imports from Asia Pacific and prospects of returning grain-loads, Vancouver and Prince Rupert can attract even more traffic to become larger "gateways" for all parts of North America.

There is a well entrenched myth that such a shift would make grain-transport more expensive, but containerization achieves significant cost-savings by eliminating consolidation requirements at source and distribution costs at end-markets. This has been proven in many other supply-chains, from automotive to electronic goods, and is now underway in grain-trades in many parts of the world – within EU as well as across Eurasia all the way to the Pacific, including China, receiving most of its grain imports from Central Asia and Europe in containers and achieving cost savings.

We can demonstrate the same for Prairie grain-exports to Asian markets. Unit-costs of moving grains in containers from production sources to the west-coast are only marginally higher than in unit-trains of hopper-cars. Across the ocean, unit-costs per-tonne on containerships are comparable to bulk-vessels, particularly the old-clunkers that operate on these lanes. Containerized shipments avoid the costs of inland and coastal grain-terminals altogether, not just at our end but also at the receiving end, which makes containerized grain shipments more cost-effective.

Even more significant advantages of containerization come from product integrity that is of utmost importance to end-users that are prepared to pay a premium to get the specific grades or varieties of wheat they need. We hear lots about the integrity

of our bulk-systems, highly compartmentalized to handle specific grades or types of wheat. These virtues might have meant something when there were no alternatives, but now that containerization has become standard practice in moving grains across Europe and Eurasia, these assurances have become hallow. There is no way for bulk-exports to compete with containerized shipments, bagged and sealed at source to protect product-integrity, and delivered at final destinations identity-preserved.

Then, what is all this skepticism about and why is there not a rush to containerize grain-exports? Naturally, vested interests in bulk-trades are defending their turf, as they are heavily invested in inland consolidation and coastal terminals. Also, the railways are heavily invested in rolling-stock, now the new generation of hopper-cars replacing old government ones. They are resisting change to protect their corporate interests, but at the expense of producer-interests and the grain economy at large.

Too absorbed in our own history of always moving grains in bulk by rail, we tend to view this a *celestial dictum*, the only way of moving grains to export markets. We ignore what has been happening around the world with the advent of intermodal-transport and the virtues of containerization – benefits of point-to-point shipments in volumes that end-users need. We have accepted this in exporting pulses but cannot seem to embrace the same imperative for other crops, including wheat.

Producers have realized the benefits of direct sales to corporate buyers across North America but cannot seem to relate to the fact that the same can be done overseas. A big part of this is fearmongering by vested interests that selling to foreigners comes with trade-risks, which clearly can be mitigated if not avoided with farm-gate payments. There is also the belief that inland container supply problems are insurmountable, which is not true as it is just an operational challenge to overcome.

We made considerable progress in the last year in overcoming this resistance, but there is indeed a remaining challenge: too few overseas buyers scouting the Prairies for grains. This is an area where we are determined to recast our image from a bulkexporter to a prime source of a huge variety of quality crops that can be procured directly from producers. Also, we are reaching out to overseas buyers in targeted markets. We introduced our malting-barley initiative in our last article; now we are turning our attention to wheat, including durum and other high-value varieties.



# A case-study of missed opportunities: China

Surpassing the US, China has become the world's largest grain-producer, but while the US remains the largest grain-exporter, China is by far the largest grain-importer in the world. Though wheat is China's third largest crop, behind corn and rice, with 134 MT in 2020 China also became the largest wheat producer – followed by EU, India, Russia, US, and Canada. China's rise through the wheat-production ranks has been phenomenal: 25 MT in the early 1960 and now more than 5-times that volume on the same land-area allocated to wheat, a remarkable yield-improvement story.

Even this rapid rise in production, however, was not fast enough to catch up with consumption, fueled largely by population growth but also increasing per capita consumption. Even before the reform era China could not produce enough wheat, running a deficit of about 20 MT from mid-1960s to mid-1970s, when we had started exporting wheat to China. Into the first reform decade, production growth picked up pace but could not keep up with consumption, running an 80 MT deficit. In the next 20 years consumption growth slowed down, but production still fell 100 MT short.

After a slump in the late 1990s, production growth picked up pace from early 2000s onwards. Into the fourth reform decade, 2006-17, China started producing more than what it was consuming, achieving a surplus of 60 MT in that decade. But rather than exporting that surplus, it continued to shore up its reserves, which had been increasing throughout the reform era by importing more than what was needed. In this last decade, reserves topped 100 MT, and now are estimated at 120 MT – the largest reserves in the world, an important part of China's food-security strategy.

On the surface, it appears that China, the world's largest producer and consumer of wheat, appears to have achieved self-sufficiency. Now that it has almost a year's worth of supplies in stock, it may start exporting its surplus. Moreover, now that its population is no longer growing, by continuing its past record of yield-increases, its surpluses may even get larger to turn China into a major exporter of wheat on the world stage. However, we do not agree with any of these assumptions, and to the contrary, we see China as a very promising export market for high-grades of wheat.



We acknowledge the remarkable yield increases China has achieved in the last 50 years: more than 5-fold production increase on the same land-area. But there are limits to the scope for further yield-increases, as China's yields are already 50% higher than Canada, and about the same as the US. It has the advantage of winter growth, as does the US, but its soils are nowhere as good as ours for wheat-growth. Even if China could push the yield-envelope further, it would allocate more land to other crops that it needs more of but currently imports in huge quantities – its total grain imports (130-135 MT/yr.) are already as much as its total wheat production.

On a per capita basis China consumes about 90 kg of wheat a year, more than most countries in the region, where only South Korea comes close. This is comparable to the US, but Canada and Australia are at 300 kg, EU, Russia, and Ukraine at 250 kg. China consumes more rice than wheat, about 100 kg per person per year; though this is lower than many other countries in the region (like Indonesia, Thailand, and Vietnam) it shows no signs of increasing. Per capita wheat consumption, however, is on the rise, albeit slowly, and in a few years can easily reach 100 kg., only a third of Canada or Australia, 40% of EU – this would increase annual consumption by 15 MT.

More significant than the quantity of China's wheat-needs, however, is its quality, grades and varieties required to meet consumption needs that are rapidly changing, driven by its own affluence and western culinary influences. Traditional Chinese food-staples – noodles, steamed-bread, and dumplings – currently account for close to two-thirds of flour-use. While bread-making takes up more than half in the West, its share in China is a mere 3-4%; cakes and cookies account for 40% in the West but half that in China. But these shares are shifting rapidly under western influences.

Traditional flour-uses are much more forgiving of lesser quality wheat-flour, as long as white-colour requirements are met (dictated by ash-content). In baking – be it bread, cookies or cakes – flour quality is much more critical, in terms of particle-size, protein-content and other product attributes. Though still a very small share of flour consumption, the bakery industry in China is growing at 15-20% a year with both domestic and foreign bakery-chains expanding their footprint across the country, while droves of boutique bakeries are opening. All sorts of western-style pastries are becoming popular and widely consumed, but the most significant trend is the bread-revolution – never before a staple, most urbanites are now consuming it daily.



Wheat Flour Use - China





Another market that is driving demand for quality flour is western-style pastas and flat-breads. The legend has it that Marco Polo took noodles to Italy from China, but now the Chinese have taken to Italian food with a vengeance – pizza chains spreading like wild-fire while Italian restaurants pop up in every city-bloc. Pizza or pasta looking foods can be found everywhere, but anybody who takes pride in cooking or eating struggles with what can be made from local flours. This market used to be characterized as niche or artisan but is now becoming a mass market; flour producers are turning their attention to it, requiring high grade wheat inputs.

Generally, large bakery-chains do buy wheat varieties they need for their own operations, but by far the largest market is the flour milling industry. This industry in China has two segments: small primitive mills catering to traditional uses, and modern ones with automated technology to produce high-grade flours. Naturally, the latter is where the opportunities are, where there are three players operating mega-mills with multiple lines, each mill with 6000-7000 T daily capacity producing high grade flours. The largest milling group in China now has double the capacity of Ardent (largest in North America), while the other two now are as large as Ardent.

The world had reached the assessment that China had become self-sufficient in wheat, a correct conclusion from a food-security perspective in feeding its massive population. But in 2020, China imported 8.5 MT of wheat, 3<sup>rd</sup> largest importer with 5% of global share in value (behind Indonesia and Nigeria). Not driven by basic food needs but culinary trends, our market assessment is that in the coming years China's annual wheat imports will increase by more than 10 MT, mostly high-grade varieties of wheat that are not (or cannot be) grown domestically. If this leaves a surplus from domestic wheat production, China will export that surplus, as it is doing now in small quantities, or cut back on wheat production by shifting land to other crops.

For example, China has become the largest durum market in the world, larger than Italy – much lower per capita consumption but 23-times the population. With little if any production of its own, China imports durum from its west – Kazakhstan, Eurasia, or for higher quality all the way from EU. As the leading producer in the world (largest behind EU members combined) we do not export any durum to China. More than just durum, we face even more export opportunities with other high quality wheat varieties that we are known for – hard-red for bread or soft-white for pastries – to meet China's flour needs driven by culinary shifts to western-style foods.



# Our direct wheat export initiatives

We have never exported huge volumes of wheat to China, at the peak a mere 2 MT, most years less than 5% of our wheat exports. Generally, our exports represented a higher share of China's wheat imports, as high as 60-70% at the turn of the century, and more recently 30-40% in the 2010s. The pattern has been erratic, not one that exudes much confidence, but there is a chance to put wheat trades on a *strategic-footing* – what we are best at growing is precisely what China needs going forward.

This strategic-turnaround is not going to come from traditional bulk-export trades; it can only be achieved through direct-sales channels. To this end, like in all crop domains, we are targeting major end-users that need specific classes or grades of wheat. Once we generate expressions of interest, we will engage in needs-analysis with all the buyers we target, solicit interest from production sources, put together consolidation options, develop handling-containerization plans, and ship orders directly to designated milling or processing plants in weekly container-loads.

We see opportunities among the major bakery-groups that have specialty wheat needs at their processing plants, typically located at or near major urban centers, but our primary targets at the outset will be the three major milling groups, all with multiple flour-mills across China where wheat-input requirements (typically mixed in with locally available grades) will vary depending on the type of flours they produce.

- Wudeli Flour Group: Private Chinese company with 5000 employees, 35-40 flour mills with advanced technology, 60,000 Tonne daily grind capacity
- Yihai Kerry: Singapore based Wilmar invested overseas Chinese enterprise, 20-25 advanced flour mills, 25,000-30,000 Tonne daily grind capacity
- <u>COFCO</u>: State-owned, Fortune-150 company, China's leading agri-business enterprise, 20-25 flour mills with 20,000-25,000 Tonne daily grind capacity

All these major flour companies have their own wheat-import quotas and are already importing on their own accounts. Wudeli is reported to have imported 1 MT of wheat last year. Wilmar group is among Asia's largest agri-businesses with operations sprawled across the region. COFCO is China's largest grain-importer (thus, the world's) with its trading group head-quartered in Geneva, Switzerland.



Canada Wheat Exports to China % of total imports/exports



🔶 % China Imports 🗕 % Canada Exports

All three targets profiled above are authorized to import into China but will have to designate CGC-licensed exporters from Canada as agents to fulfill export-clearance functions. All have the financial means to make direct-payments to producers without any trade risks. As in all trades we facilitate, we will provide the necessary procurement, consolidation, testing, handling, and logistics arrangements, and negotiate on behalf of producers to ensure farm-gate payments (depending on class and grade) for every load of wheat shipped. We will arrange the necessary channels depending on specific contract terms between the buyer and multiple producers.

We will be directly involved in discussions with all three major buyers but are also assembling a team in China to lead these efforts. As our discussions proceed with these targets, our team also has a mandate to reach out to leading bakery-chains with processing operations on the mainland, as well as boutique-mills that specialize in finer flour-varieties. The latter is a growth sector catering to high-end bakeries as well as pasta-makers, using the same advanced milling-technology as the large milling groups – with the modular nature of milling-lines facilitating this growth.

Though our immediate focus is on China, the largest potential market and one that we are most familiar with, our wheat-export-facilitation efforts in the coming months will extend to the rest of Asia Pacific. Indonesia has become the world's largest wheat importer, importing 10-11 MT annually. We have a designated agent in Indonesia but are looking into container-supply challenges. We have a significant trade surplus with Indonesia but are trying to balance imports (rubber, electricalelectronic equipment, and knitted-woven apparel) with containerized grain exports – among them wheat should be primary, but is now mainly sourced from Australia.

The next largest wheat-export market in the region is Philippines, where we have lined up a representative but do not fully understand either the industry-structure or the trade-dynamics. However, it is not a market to be overlooked, thus we will be paying attention to it; the same applies to Vietnam and Thailand. Both Japan and South Korea import 4-5 MT of wheat annually, which we are looking into and will combine our marketing efforts with malting-barley. We will report on the progress we make across the entire region, together with our next update on China-initiatives – we see as much wheat-export potential in the rest of the region as in China.

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	HONOOLA	5		Japan	Korea	Indonesia	Philippines	Malaysia	Thailand	Vietnam
Li	E CHINA - C	April 1	Wheat	4-5 MT	4-5 MT	10-11 MT	6-7 MT	1-2 MT	3-4 MT	4-5 MT
5	Rade-	_	Corn	15-16 MT	7-8 MT	1-2 MT	1-2 MT	4-5 MT	1-2 MT	9-10 MT
-			Other	4-5 MT	3-4 MT	2-3 MT	2-4 MT	2-3 MT	1-2 MT	2-4 MT
1.			Total Imports	23-25 MT	15-17 MT	13-15 MT	9-12 MT	7-9 MT	5-7 MT	15-20 MT
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