Malting Barley Export Prospects

As we promised in our last article, we are continuing to detail the crop domains we are prioritizing for our interim trade-facilitation efforts: this one is on barley, a crop we have always grown and exported, but one that has traditionally not been paid enough attention. In recent years, we made significant strides increasing yields and introducing new malting-grade varieties, but producers could not access the export channels necessary to reap the full benefits of growing these higher-quality varieties.

In this article, we start with an overview of production and export shares of leading barley producers around the world. Before last year's drought, Canada ranked 5th in both production and exports, and with this year's harvest it is expected to produce around 10 MT. This would leave at least 4 MT, perhaps as much as 4.5 MT surplus to export after looking after domestic needs, making us world's 3rd largest exporter. But what share of the export-proceeds will be left in the hands of barley-producers?

Then we turn to the types of barley we produce, general-purpose or malting-grade. In recent years, we made significant strides to improve the crop-quality and malting-attributes of the malting-barley varieties we grow. Producers embraced the newly advanced seed varieties in the hope of getting higher prices for what they grew but could not reap the benefits. Malting-barley reached 50% of our total barley output, but in the last 5 years the share of land-area seeded with it has been declining.

Producers used to get a premium for malting-barley over feed-grades, enticing them to grow more, but premiums dwindled with increasing volumes. Domestic demand for malt was stagnant, thus the surplus shifted to domestic-feed or exports. Malting-barley is in demand in overseas markets at higher prices than what producers get domestically, but like in most crops, exports are captive to bulk-channels. Bulk-traders have little incentive to pay any more for malting-barley than feed-barley.

The solution to this dilemma, a market failure, is not to cut back on malting-barley production, but to open direct-sales channels to export more to overseas. To this end, we turn to global demand for beer, the principal end-use for malting-barley. Beer consumption may be stagnant if not declining in North America, but it is on the rise globally, particularly in Asia Pacific where China has become by far the largest beer-market. Also, there is a shift to craft-brewing, not just in China but also Japan and Korea, boosting demand for high-quality inputs, raw or already malted barley.

In the last section, we turn to our own efforts in facilitating the development of direct-sales channels to export much larger volumes of malting-barley or already processed malt. In this vein, we are initially focusing on China, followed by Japan and Korea, as well as 5 other beer-markets in the region. We are already getting an enthusiastic response from barley-growers, which we hope to galvanize with our market-facilitation efforts. We are also making a pitch for support from public agencies already active in this domain, as well as the barley-grower-associations.

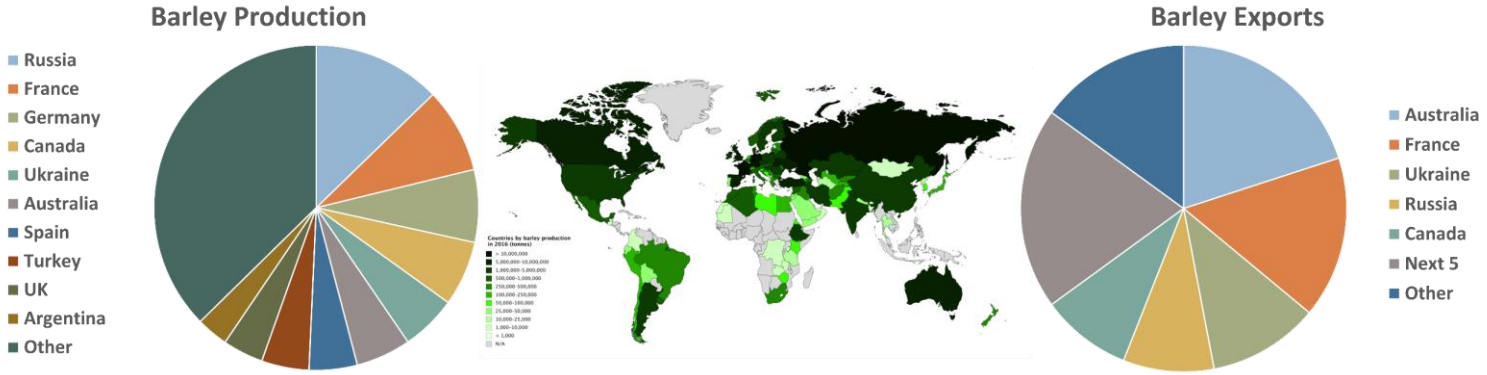
Global barley profile and our position

Barley is an ancient crop with evidence of it growing in the wild from North Africa to the Middle East to Central Asia, and with first signs of its consumption dating back to 23,000 BCE around the Sea of Galilee. First evidence of its cultivation was found in Mesopotamia going as far back as 9,000-7,000 BCE, soon spreading across the Fertile Crescent and many parts of Eurasia. By 2,000 BCE, its cultivation had spread east through Persia, India, and all the way to the Korean Peninsula, and west into Europe, with evidence of it in both Greece and Italy. By 4,000 BCE, barley-bread was eaten across Mesopotamia, with evidence of malting in Egypt and barley-beer in Sumer.

This vast footprint across 3 continents attests to barley's adaptability to very different weather and soil conditions, in the wild and in cultivated forms. After spreading across Europe, during the colonial era through the 16th and 17th centuries, barley was introduced to South America by the Spanish, and to North America by English and Dutch settlers. To our time, barley remains an important source of both human-food and animal-feed, as well as leisure (or intoxication!) through malting-brewing and even distilling – whether grown locally or imported from elsewhere.

Though grown in much smaller quantities than the 3 leading crops – corn (1200 MT), wheat (780 MT), and rice (510 MT) – barley still ranks the 4th largest volume crop, with 160 MT grown annually across most grain-growing countries. To avoid the most recent year, 2021, when North America was stricken by a severe drought, it is best to look at the global production profile of barley for 2020. Russia was the largest producer with 20.5 MT, followed by France 13.6 MT, Germany 11.6 MT, Canada 10.4 MT, Ukraine 8.9 MT, Australia 8.8 MT, Spain 7.7 MT, Turkey 7.6 MT, UK 6.5 MT, and Argentina 5.1 MT, with 7 others producing more than 2 MT, and 10 more than 1 MT.

Despite this widely distributed production pattern, significant volumes of barley are traded, 40-45 MT annually. Rather than volumes, however, let us look at the dollar value of raw barley exports in 2021. The largest exporter was Australia with almost 20% share, followed by France at 16%, Ukraine 11%, Russia 9%, and Canada also with about 9% ranking 5th. These leading 5 exporters represented about 65% of global exports. The next 5 – Germany, Argentina, Romania, Denmark, and UK – represented another 20%, thus the top-10 accounting for 85% of global exports.



In the 2020 calendar-year our barley exports were 2.8 MT, and despite the severe drought increased to 3.6 MT in 2021. These were significant increases from the decade before when annual export volumes were in the 1 to 1.5 MT range. We anticipate this year's harvest to yield about the same as 2020, around 10 MT. Even with very low stocks carried over from the previous drought-year, after domestic uses, our export volumes in the 2022-23 crop-year could be above 4 MT, perhaps as high as 4.5 MT. There are already indications in the 2022 calendar-year that our exports are above Russia, and even Ukraine, elevating us to 3rd in export-ranks.

The main driver of our export growth has been increased production in the face of stagnant domestic consumption, leaving more surplus to export. In the last decade land-area planted with barley expanded significantly: in 2021, 3.36 million hectares, 10% more than in 2020, and 23% above the 10-year average. This expansion was particularly evident in Western Canada, especially in Saskatchewan and Alberta (not as much in Manitoba or British Columbia). Expanding as much as 50% in the last 5 years, the region now accounts for 97% of barley-seeded land across the country.

This trend was driven by yield increases, giving incentive to growers to switch from other crops to barley. Measured in bushels per acre, from 2011 to 2020, yields increased from 55 to 70 in Saskatchewan, 65 to 75 in Alberta, 45 to 80 in Manitoba. With the 2021 drought, however, yields dropped to as low as 35 in Saskatchewan, 45-50 in Alberta, and 55 in Manitoba – the lowest yields in a decade in all three provinces. Before the 2020 drought, total production in Western Canada was 25% above the 10-year average, as much as 37% in Saskatchewan, 26% in Manitoba, and 16% in Alberta-BC. After much lower levels of output in 2021, this year's harvest, is expected to yield comparable if not higher levels of output per acre than in 2020.

Seeded area
(million hectares)

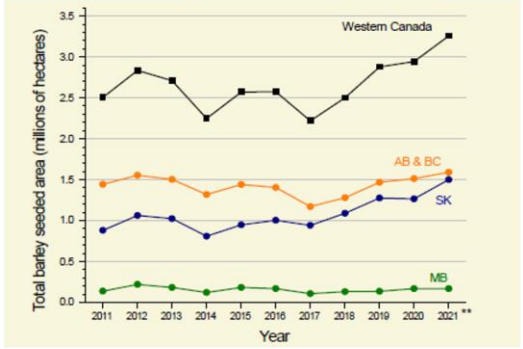
	2019	2020	10-year average*	2021**
Manitoba	0.136	0.168	0.155	0.167
Saskatchewan	1.275	1.264	1.029	1.500
Alberta & British Columbia	1.467	1.512	1.409	1.590
Western Canada	**2.878**	**2.944**	**2.598**	**3.257**
Canada	**2.996**	**3.060**	**2.733**	**3.357**

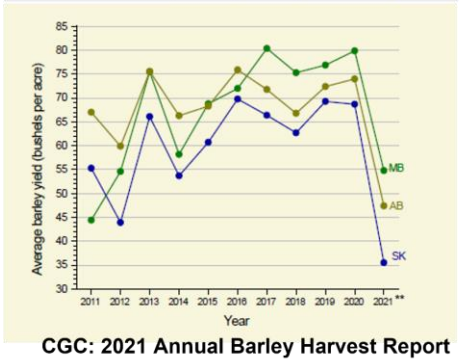
Average barley yield
(bushels per acre)

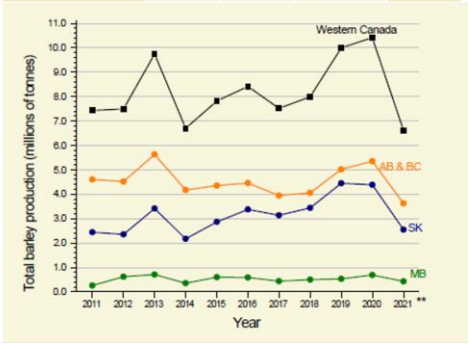
	2019	2020	10-year average*	2021**
Manitoba	76.9	79.9	68.6	54.8
Saskatchewan	69.3	68.7	61.7	35.5
Alberta	72.4	74.0	69.8	47.4
Western Canada	**71.1**	**71.8**	**66.6**	**42.2**
Canada	**70.8**	**71.1**	**66.1**	**43.0**

Production
(millions of tonnes)

	2019	2020	10-year average*	2021**
Manitoba	0.529	0.686	0.528	0.432
Saskatchewan	4.449	4.385	3.202	2.547
Alberta & British Columbia	5.018	5.345	4.611	3.624
Western Canada	**9.996**	**10.416**	**8.353**	**6.602**
Canada	**10.383**	**10.741**	**8.772**	**6.948**







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As impressive as the yield increases of the last few years have been, let us try to put them in an international perspective. The two major Western European producers, France and Germany, achieve 80% more, but we are 60% above Russia, the largest producer, and 10% above Ukraine that produces comparable volumes to us. The two other producers in the Americas, Argentina, and the US, are 10% above us, but our principal export competitor, Australia, achieves only half the yields we do.

In drawing such comparisons, we must bear in mind that the differences are more due to weather and soil conditions than science-and-technology. While our climatic conditions limit us primarily to one harvest, France and Germany squeeze two, thus achieving higher yields. Advances in agronomy may hold more surprises to boost yields, but we cannot expect more of the same as the last 10 years. Instead, we must focus on the type of barley we produce and how we export to get more value.

The primary uses of barley all around the world are feed and malting, in roughly two-thirds and one-third shares respectively. We produce more malting-barley, but in terms of use, our shares are not that different. With high protein and starch content, barley is an excellent source of feed for cattle, dairy cows, and hogs. Barley has always been a main source of feed to meet our domestic needs, but we also export significant volumes. Our principal export destinations for feed-barley had been Japan and Saudi Arabia, but lately we export much higher volumes to China.

Feed-grade barley, classified in Canada as *general-purpose*, is on our radar screen but in a very different way than how barley has been exported in the past, mostly in bulk, originally by CWB and now through private trading channels. We see a huge potential in containerized exports of feed-mixes (barley and other grains, with additives and nutrients) directly delivered to feed-lots – customized to individual buyer's (feed-company or end-user) needs, be it for cattle, hogs, chicken, or dairy.

Here, however, we focus on *malting-barley*, in our opinion a grossly neglected or underserved crop domain from a sales-marketing angle. At the production end, in a region where most of our barley is grown, the Prairies, 50% is malting grade, and in Saskatchewan as much as 60%. In 2020 this would have been more than 5 MT of malting-barley, but we estimate that no more than 3 MT was purchased as malting-barley from farms that year, the rest going into feed-chains. We also estimate that Canadian maltsters purchased no more than half this amount to produce malt, the rest being exported but not clear whether used for malt or feed in end-markets.

These numbers clearly suggest that there are two problems in the barley domain. The first is that as the world's leading malting-barley producer in quality as well as grading-standards (which we will get into in more detail next) only 60% of all the malting-barley we grow is bought as such, the rest obviously going into feed-chains. The second is the price farmers get for what they sell as malting-barley – what overseas buyers are prepared to pay for quality malting-barely is much higher than the meager margins that domestic maltsters pay to compete with feed-barley prices.

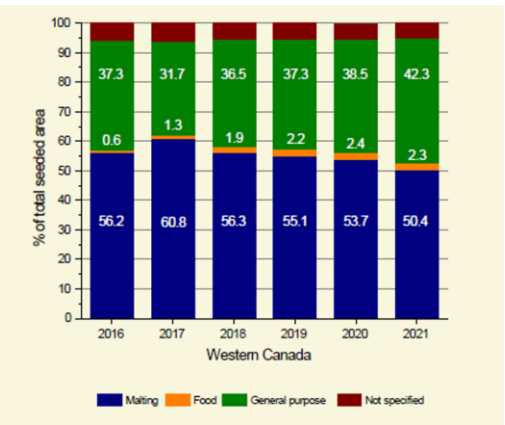
Shift to malting-barley and the export-dilemma

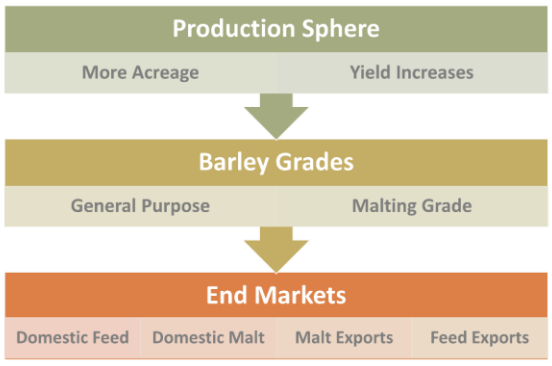
Though an ancient crop and widely grown under various soil and climatic conditions, barley had posed cultivation challenges. In addition to its structural flaws like weak straw and easy shattering, it had been known for its proneness to bacterial blight, fungal and viral diseases. All these factors contributed to poor crop quality and unpredictable yields, but it did not seem to matter as long as barley grew and met basic on-farm feed needs, with limited trading scope, particularly across the Prairies.

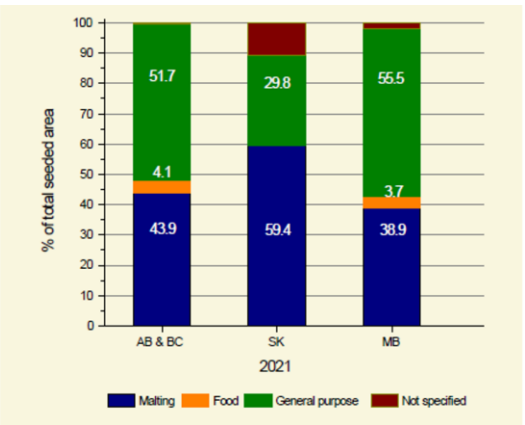
With advances in agricultural sciences, all this changed later in the 20th century. Like most other crops, barley ceased to be a creature of nature and became a cash-crop that could be engineered by improving its agronomic traits and resistance to disease, while achieving higher yields to make barley more attractive to farmers with much better revenue prospects. Not too long-ago farmers used to keep half the barley they produced to feed their own animal-stocks, but now barley is widely traded commercially as a premium source of feed with high protein and starch content.

Two-thirds of the barley produced worldwide is used for feed, but this is still a small share among other staple crops that make up the world's feedstocks. We use more barley than most countries to feed hogs, cattle, and dairy cows, but in the aggregate, this is still a small volume. Given the quality of grades and varieties we grow, there is a much greater value proposition in malting-barley. Though a higher-share of what we produce is malting grade, only about a third of our output ends up being used for malting, about the world-average. We do not market effectively and fail to open the necessary sales-channels for producers to realize the higher prices they deserve.

Across the Prairies, in 2021 malting-barley represented 50% of all barley-seeded area – close to 60% in Saskatchewan, only 39% in Manitoba and 43% in Alberta-BC. The regional average had declined from 56% since 2016, but now in total with more land seeded with barley (25% increase from 2.6 to 3.3 million hectares) the land-area seeded with malting-barley remained the same. As a result, with yields remaining steady, total malting-barley output was the same in 2020 as 5 years earlier. With next year's drought, output dropped 40%, but this year we expect a return to 2020 output levels, about 10 MT, evenly split between malting and other types of barley.





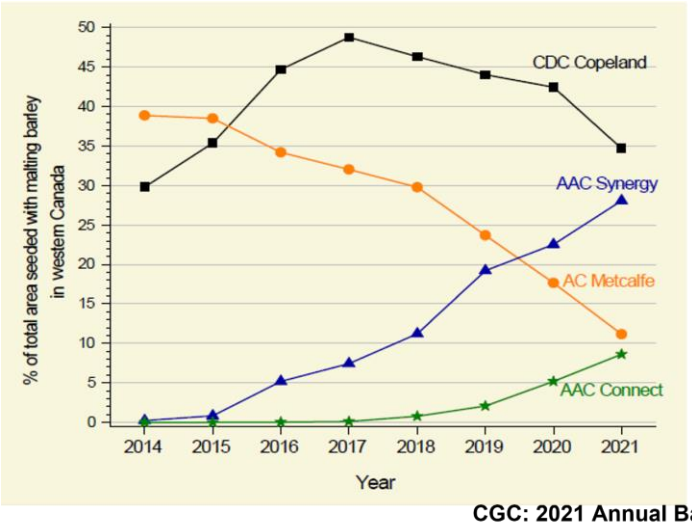


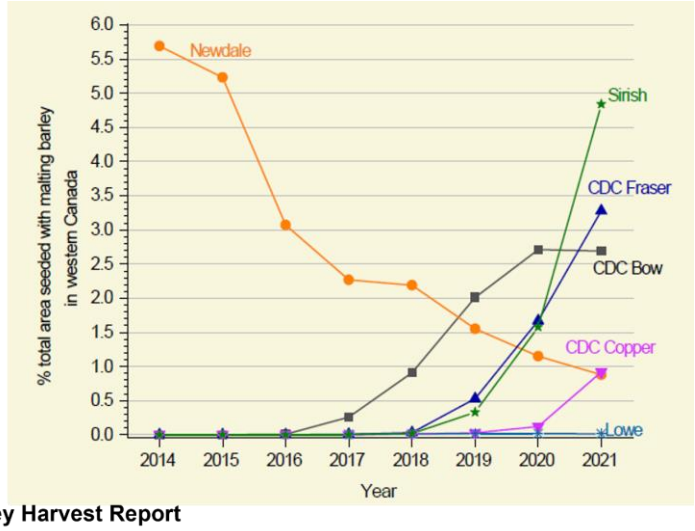
Traditionally, producers were enticed to grow malting barley by the price-premium they got over feed-barley, generally in the $0.50-1.00 per bushel range. Principal buyers have always been local maltsters, willing to pay the premium to procure about 1.5 MT annually, to produce malt to meet both domestic and export demand – in some years exporting as much as two-thirds of their output. But Prairies grow much more malting-barley than this, tightening the premium producers enjoyed, with evidence of late that feed-brokers pay just as much if not more for barley.

There are opportunities to export malting-barley to overseas maltsters, but direct sales-channels are not there for producers to utilize. Instead, barley, like most of our other crops, is bought from producers and consolidated by grain-traders to export in bulk. These traders, however, have little incentive to pay a premium over feed-grade barley as they only have feed-lots (or feed-traders) to compete with. They likely charge a premium for malting-grades to their buyers but hold on to those extra profits with little if any trickling down to producers for growing higher value crops.

In the absence of sales-channels to export overseas directly, barley is yet another victim of producers' captivity to bulk-trades. In 2020 barley growers had a surplus of 3 MT of malting-barley over and above what domestic maltsters bought, but this surplus had to be sold at or near feed-grade prices, even to bulk-export channels. Moreover, there were opportunities to grow even more malting-barley at the expense of feed-grades, but with little incentive to do so without a price premium.

We already talked about advances in agronomy driving yield increases, but there was much more to this story through new seed varieties with superior malting qualities. Producers responded by switching to these new seeds with much better malting attributes – but got little reward in return. Among the dominant seed-varieties, CDC Copeland is down from almost 50% to 35%, and AC Metcalf from 40% to 10%, while AAC Synergy and AAC Connect combined, both introduced in the mid-2010s, are up to almost 40% share of the malting-barley seeded areas. Also, other varieties like Sirish, Fraser, Cooper, and Bow, have increased to 10-15% just in the last 5 years.





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These new crop-varieties were the results of R&D efforts led by the *Canadian Grain Commission* and *Agriculture Canada* over the last decade or so, making up for all the neglect inflicted on barley, while wheat, canola, pulses, and other specialty-crops were given all the attention. Improvements in crop quality and yields were there for everybody to see, but still, rigorous testing continued through annual crop-surveys scrutinizing all the crop attributes that maltsters and brewers alike were looking for. At the same time, all the necessary resources were made available for lab-testing facilities for malting, particularly at the *Canadian Malting Barley Technical Centre*.

However, not enough was done to ensure that growers were realizing the benefits of these advances. North American markets for malting-barley were limited and thus could not absorb much more. Growers were forced to sell at little or no premium above feed-grade barley, into feed-chains or bulk-export channels. Our mission is to open direct-sales channels to export markets, giving growers a chance to realize the benefits from this *malting barley renaissance* that our public-agencies initiated.

There is a clear picture that emerges from what we just discussed, a rather ironic story: we made huge advances in cultivating superior malting-barley seeds and got producers to adopt them with enthusiasm, but producers have not realized the benefits from growing these superior grades and seem to have stopped switching more of their land to them. The malting-barley varieties they are growing are arguably the best in the world, but they cannot seem to get a premium over feed-grade barley – obviously, there is something broken in the malting-barley-chain.

We have a well-developed malting industry, going back to the early 20th century, building some the largest and most advanced plants of their time, and keeping up with the latest methods and technology over time. Our malting companies not only meet domestic needs, but also export 60-65% of the malt they produce. Even their primary customers, brewers, produce more beer than consumed domestically, thus export significant volumes. But still, this sector takes up no more than 2 MT of malting-barley a year, leaving 3 MT surplus with little effort made from the existing industry ranks or new entrants to expand capacity to produce and export more malt.

Part of this surplus gets channeled to domestic feed-markets but most of it is bought up by grain-companies that export to overseas market in bulk. Canada does not track how the grains we export are used in end-markets to know whether the barley we export ends up being used for feed or malting. But we know from what we produce that exported barley volumes contain a significant share of malting-barley; exporters may be getting higher prices but little if any of it trickles down to growers.

There is ample demand for both malting-barley and malt in Asia Pacific markets, but more of an effort must be made to open direct-sales channels for growers to receive higher margins for the malting-barley they produce. Once those export channels are established, local maltsters will also have to compete at the same prices to procure barley to produce and export more malt, even better in terms of value-add locally.

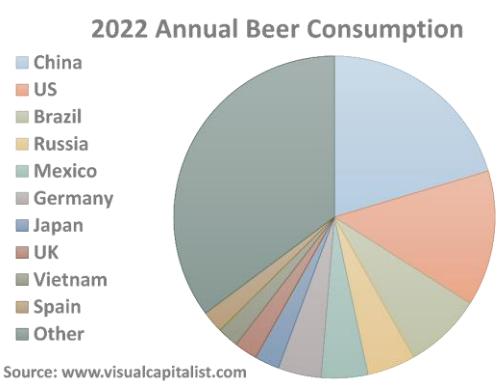
Malting-brewing trends and export prospects

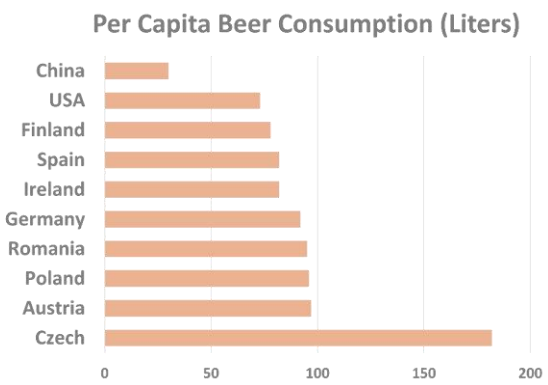
The principal end-product made from malting-barley is beer, by far the highest volume alcoholic drink in the world. The intermediate step is malting, the process through which raw barley is steeped, germinated, and dried. The main input for brewing is malt, though in the process much smaller quantities of other grains and hops may be used for color, texture, or taste. We will come back to the intermediate step, malting, but let us start with beer, which is the principal demand-driver for malting-barley – though small quantities are also used for food and other drinks.

In a widely quoted study annual global beer consumption in 2020 was estimated at 177 billion liters. By far the largest beer-market was China, estimated at 36 billion liters (20% of the global total) followed by the US at 24 billion liters. But a more recent study revealed a much higher estimate for China, 47 billion liters in 2022. Unlike in the US, beer consumption in China is on the rise, about 7-8% annually, but there is no way it could have increased by 30% in two years. Either way, the Chinese beer-market is huge, be it 50% larger or double the US, and still growing, albeit more slowly than a decade ago – even a 2% annual growth increment is 1 billion liters.

Aside from the sheer size of the market, there are two other factors to bear in mind. First, per capita consumption is still relatively low, less than 30 liters/year, compared to the Czech Republic where per capita consumption is 182 liters, the highest in the world. If we set this aside as an anomaly, even the US average is 73 liters, 2.5 times China's; there are 15 other countries above the US but below the Czech Republic. At the same consumption rate as the US, which is quite conceivable, China would be consuming 115 billion liters of beer, 65% of today's total global consumption.

Second, there is a marked shift to higher-end brews, with market value increasing much faster than volume – increasing 42% in the last 5 years, 7% last year alone. When beer-consumption started to boom 40 years ago, all you could find were low-end domestic brands (like Tsingtao or Snow). Into this century foreign brands of similar ilk (like Budweiser or Coors) stormed the market but were brewed locally by their brand-owners in partnership with local-brewers. A decade later a brand-revolution got underway in earnest, with high-end brands imported in bottles or casks and served in high-end pubs or sold in up-scale grocery-stories in major cities.





Part of this upscale movement was the birth of craft-brewers and brew-pubs. Both got underway with the entrepreneurial initiatives of beer-enthusiasts, expats trying to prove their foreign-credentials or locals who had been exposed to beer-cultures overseas. One of the first brew-pubs in Shanghai was a Canadian venture, now bought by the world's largest brewing conglomerate, Anheuser-Bush, a clear sign of corporate-endorsement. But many other *bona fide* experts have had success as well, including European brew-masters – one chain of brew-pubs across China led by a German has more than a dozen pubs, owned or franchised. The number of craft-breweries or brew-pubs were counted in dozens a decade ago but now in hundreds.

This is still a niche-market, with volumes estimated at about 2.5% of the Chinese beer market, albeit a higher share of the revenues. It is not going to develop into a mass-market overnight, but it is expected to grow rapidly to grab a 10% share of the vast Chinese market and will become a sizeable sub-market in its own right. This sub-market would become as large as Japan's current beer-market, 7th largest with 4.5 billion liters – more than double the size of the total Canadian beer market.

Leaving aside this sub-market, let us look at China's overall beer-market and its raw material requirements. The volume of beer China now consumes, 47 billion liters, requires more than 10 MT of malting barley to produce, but China grows less than 1 MT of barley and very little of it is suitable for malting. To brew this much beer, China needs as much malting-barley as Canada's total barley output, only half of which is malting-grade. We have about 3 MT of surplus malting-barley to export after meeting our domestic needs, which China could easily absorb. The craft-side of China's beer market, expected to reach 10% share, could take 1 MT, and with the demonstration effect another 2 MT can go to the premium brands of large brewers.

We must also bear in mind that China may not have much domestically grown barley suitable for malting, but has enough malting capacity to meet all its needs. In fact, it produces most of the malt needed for its vast beer-industry, and exports about 500,000 T of malt a year. With the upscale trends in the beer market, malt quality must improve as well, but there is already the knowhow and technology to rise to the occasion. Also, craft-beer trends will bring about similar changes in malting, as we saw in Europe and even North America, brewers internalizing their own malting or sourcing from craft-maltsters, giving rise to high-quality malting-barley imports.

From our own Canadian perspective, or specifically a Prairie perspective, it does not matter whether we cater to China's needs with malting-barley or malt exports. With direct-exports of malting-barley our growers will benefit from higher prices, escaping their captivity to bulk-channels or having to sell their crop intended for a higher purpose to feed-markets. If exports are in malt, domestic maltsters will have to compete with direct export prices to procure their barley needs, benefiting not only growers but also the local economy with more value-add from processing the barley.

In this article we focused on China, the largest market in the world that can absorb as much malting-barley (or malt) as we can produce. However, there are other markets that cannot be ignored, the largest among them is Japan, which consumes 4.5 billion liters of beer a year with little home-grown malting-barley. Japan requires about 1 MT of malting-barley for beer production, but in total produces 200,000 T of barley with little of it suitable for malting. Most of Japan's malting-barley is sourced from Australia, while most of what it imports from us is used for animal-feed.

In Asia Pacific, which we target as our prime region, there are 6 other countries that have our attention. In beer-market rankings, Vietnam is just behind Japan, 9th with almost 4 billion liters, followed by South Korea ranking 17th with 2 billion liters. Another two are in the top-25, Thailand 24th with 1.7 billion and Philippines 25th with 1.5 billion. Malaysia is ranked just below the Philippines, even though it has one third of the population and more Muslim influence. Indonesia's population is almost 3-times larger than Japan, but being mostly Muslim, consumes only 0.5 billion. In total, this region consumes about 15 billion liters of beer a year – at par with the 3 largest European markets combined (Germany, UK, and Spain) and larger than Brazil.

Throughout the Asia Pacific region, our main competitor is Australia, which produces a little less barley than us but exports twice as much to rank the world's top barley-exporter. There is a misconception that Australia is closer to these markets; in fact, we have an advantage both time and cost-wise, particularly to Japan, Korea, and most parts of China. Moreover, there are plenty of containers returning empty across the Pacific, backhaul in these lanes that can be utilized in grain-exports.

Most importantly, we have a distinct advantage in the variety and quality of malting-barley we produce. A lot of research effort has gone into developing seed varieties that are more suitable for malting, with attributes that can distinguish us in high-end malting or brewing markets. Failing to leverage these advantages, we let surplus malting-barley domestic maltsters cannot absorb be consolidated and sold in bulk.

As in all other crops, we must break away from bulk-trades, and instead mobilize an effective sales-and-marketing strategy to position the barley varieties we grow in overseas markets by extolling their virtues in malting and brewing. Next, we outline the efforts of our platform, but it is going to take much more than what we can do on our own. We need the participation of all parties involved in this crop-domain – agencies engaged in R&D (agronomy and malting) as well as producer-associations.

Our export facilitation efforts

China's beer consumption dwarfs the rest of the Asia-Pacific, consuming 47 billion liters of beer compared to 15 billion by others. The combined input requirements are roughly 13-14 MT of malting-barley or malt. Our objective is to create direct-export channels for 3 MT of malting-barley, surplus from 5 MT of what we produce, after purchases by what domestic maltsters, 2 MT. These exports could be raw or malted barley, both helping growers, but the latter leaving behind more value-add.

Rather than tackling the whole market at once, we are taking a strategic approach, starting with the easiest segment to tackle, and expanding from there, segment by segment and country by country, as each will require a different approach and we have limited resources. We will prioritize our efforts in the following sequence:

- Start with craft brewers and/or maltsters in China's burgeoning high-end beer-market, expanding rapidly but short of quality malting barley or malt
- Use this as a launching pad, leveraging the craft-market's demonstration effect to expand to high-end brands brewed locally by established brewers
- As backup to (or extension of) China-efforts, reach out to craft-brew markets in Japan and Korea, limited in scale but still with strong growth potential
- Explore both craft and conventional prospects in the remaining 5 regional markets through local brewing interests to avoid protectionist resistance

To facilitate our initial market-reach efforts, we have already lined up Chinese, Japanese and Korean speakers in our team. We are familiar with all three of these markets but still need help from native support. In Philippines, Thailand, and Indonesia, we have lined up representatives to help us better understand local market conditions, before formulating the most effective approach strategies. We are still trying to work out the best way to approach Vietnam and Malaysia.

We have already done considerable research into brewing and malting industries in China, as well as into consumption trends. We now have a working relationship with a group that owns and operates bars and restaurants. We are also in discussions with a group that is planning to start brew-pubs or craft-breweries in four different cities, while debating whether to get into craft-malting. Though they are nowhere near buying anything, their perspectives are proving invaluable in guiding our efforts.

It also helps that we have been observing the evolution of the entertainment and culinary scenes in China over the last 25 years. Having lived there for 10 years, we even dabbled in the peripheries of this business, even considered opening brew-pubs. We are convinced of the market potential that we are trying to tap into, and are confident about our ability to reach potential buyers, be it brewers or maltsters.

However, there is one obstacle that we need to overcome: importation of barley or malt is subject to government regulations and quotas; individual buyers cannot import directly, like our producers who can only export through licensed-agents. To

resolve this issue, we are now searching for a company that holds a barley-import quota. There are plenty to choose from, but we want the same party to take on the local distribution functions, or at least find a partner to work with in this capacity.

On the surface, there has been an explosion of microbreweries in Japan, their numbers quadrupling in the last decade or so, from 200 to now more than 800, but the sector is under enormous pressure from the country's 4 mega-brewers. The latter have been starting their own microbrew-brands and lobbying intensely to keep microbreweries at bay. Tax-laws impose an annual production limit of 2,000 kilo-liters, which basically limits microbreweries to operate as beer-halls or restaurants, which in turn gives rise to severe challenges in distributing malt to these enterprises.

South Korea is a smaller market, but more open to craft-breweries that are rapidly expanding their footprint. Also, it is easier to import barley or malt into the country. The largest brewer is owned by the Belgian giant Anheuser-Busch, which rather than taking a hostile position to microbrewers, is buying or investing in them, like the Shanghai example we gave earlier. As we intend to approach the latter, which we are very familiar with, we are looking into ways of doing the same in Korea.

In addition to our discovery and marketing efforts in China, Japan, and Korea, we have a lot of work to do here to embellish our website and extend its reach:

Website enhancements: As our regular followers would have noticed, we recently introduced changes to our website, in fact fundamentally restructured it for trade facilitation purposes. There are two new tabs on malting-barley, one aimed at buyers with information on our production capacity and crop-varieties, and another aimed at producers with information on end markets and export opportunities. In the coming months, you will find weekly updates with new content on both tabs.

Producer participation: To attract the attention of prospective buyers, we profiled a particular region in Saskatchewan, Parkland, known for growing high grade malting-barley varieties. In the coming weeks we will be posting producer-profiles, with the purpose of showcasing farms that produce malting-barley. Harvesting is standing in the way but within a month we hope to have at least a dozen profiles, which we believe will be very effective tools in promoting the region in overseas markets.

Institutional support: As evident from our website and this article, material put out by the *Canadian Grain Commission* is very helpful in extolling the virtues of this crop domain. We will rely on CGC and *Malting Barley Technical Centre* in our marketing efforts, but we must also reach out to *SaskBarley* and other grower-associations to solicit their support in our promotional efforts. We have not had much luck in this regard in other crop-domains, but we are hoping for a different experience in barley.

Internet campaign: Initially, our efforts are going to give primacy to China, and for this purpose we need a condensed version of our website translated to Chinese – an effort already underway. At the same time, within the next 6-weeks, we plan to launch an aggressive internet-campaign to reach the audiences we are targeting. The platforms we rely on most, *Google* and *Facebook*, cannot reach China, thus we are now examining other social-media and search-engine options used in China.