The Prairie Grain Portal

Collection of Short Articles on Prairie Grain Economy

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FORWARD

When we launched this portal a couple of months ago, we were convinced of the need for it but unsure of its immediate impact. We have been pleased with the results so far as our combined following, site-visits and social-media, has reached above 1000. We still have a long way to go but as we are trying to determine how to guide our promotional efforts to reach a wider audience, we thought we would reflect back on the origins of the concept and what had enticed us to embark on it.

In this vein my memory goes back 30 years to a study I had conducted into container supply bottlenecks in Saskatchewan and how they were stifling the region's economic development potential, particularly its agricultural export prospects. Before any of the recommendations, prime one being an inland-container-port, could even be considered the government had changed, putting everything on hold.

Under the new government I was appointed to Chair the Grain Transportation Taskforce -- at the time both transport and agriculture portfolios under the same Minister. The mandate was cast broadly to address all transportation challenges confronting the grain-industry, including container-supply problems. The Taskforce consisted of a retired Deputy Premier, prominent academics as well as corporate and union representatives. We issued a fairly comprehensive report, but with another cabinet-shuffle, neither the report nor its recommendations saw the light of day.

After that my career shifted to China, where I would later spend more than a decade engaged in various supply-chain and intermodal-transport projects, witnessing the development of the world's largest ports, coastal and inland. Upon my return to Canada, I was surprised to see the core recommendation of our 1990 study already implemented, *Global Transportation Hub* in Regina. But despite its grandiose title, it was largely a ghost-town, focused on land-development, not grain-handling or containerization. I had been involved in two dozen logistics and industrial parks in China, but clearly, these types of projects were not as easy to pull off in Canada.

At the farm-end of the grain-economy, however, it was a different story: astonishing progress driven by scientific-and-technological advancement. Most producers had diversified their crop-base, now running advanced farms with the capacity to grow anything the world needed. They were still trapped in a bulk-warp but given a chance would jump to the opportunity to shift to higher-value specialty crops. Lack of direct-sales and container-logistics channels were holding them back, but these challenges were a lot easier to tackle than developing the production-capacity. Producers had the foresight and the entrepreneurial spirit to drive an export-revival.

Leveraging my contacts in China, I embarked on a grain-export initiative to fulfill custom contract-orders procured across the Prairies and delivered to flour-mills, feed-lots and processing-plants in containers. It was meant to be a modest start-up but the volumes to a handful of buyers were likely to reach 1 MT or more. In developing the concept I received considerable support from the Minister I had served under in the 1990s, a fourth-generation farmer with intimate knowledge of the grain industry. I was honoured when he agreed to join my efforts, but the initiative fell victim to the abrupt deterioration in our trade-relations with China.

Stewing over the disappointment but too stubborn to give up, I came up with the *Prairie Grain Portal* concept, this time not a direct trading initiative but an export-facilitation platform. The concept was largely modelled after *Ali Baba* that I had followed closely when I was in China, how it had nurtured B-to-B sales along various supply-chains. In the process it had thrown a life-line to small and medium size enterprises (SMEs), now thriving participants in China's vast industrial-chains, often misunderstood to be dominated by multi-nationals (MNCs) and state-owned enterprises (SOEs). Also, *Ali Baba* had opened up export opportunities for SMEs. The concept had to be modified to grain-trades but held a great deal of promise.

Again, I had the fortune of my Minister's wise counsel and support, delivering his final verdict as follows: I can't see why producers would not be keenly interested. Shortly after our launch, another prominent figure signed-up to our portal, the Premier of Saskatchewan when I had undertaken the 1990-study that got me started down this containerized grain-export path. With encouragement coming from both ends of the political spectrum, not just politicians but prominent figures engaged in agriculture all their lives, I was convinced of the viability of our novel mission.

Of course, these are still early days; 1000 plus followers of a new portal-initiative is not going to set the grain-industry on fire. But it looks like we are on to something that may steer the future of the Prairie grain economy in a new direction, paving the way to greater prosperity for producers who care to take advantage of new export channels. Naturally, we still have doubters if not critics among our visitors, but we have to do everything we can to win them over, with not just ideas or concepts but real results in the export arena. At least, I am encouraged to continue down this path of further crop-specialization, direct-sales and containerized logistics channels.

Once we launched the portal, we knew we had to embellish the concept and elaborate on *why* we were doing this, *how* we were going to pursue it, and *what* results we expected to come out of the initiative. To this end we planned to publish more content, which we have been doing over the last two months by publishing new posts every few days. This volume is a compendium of ten such 5-page articles, introduced with this *Forward*, and at the end concluded with *Next Steps*.

The first two posts focus on "why". *Specialize or Perish* tries to bring attention to producers' captivity to bulk-trades and the margin-squeeze these trades put them under. *Path to Prosperity* expounds on the need to shift to higher-value crops, specialty grades of our staples or new varieties, and to this end, the need to open up direct-sales channels and develop the necessary container-logistics capacity.

The next three posts focus on "how". We describe the collaborative nature of the trade facilitation process, by first urging producers to participate in the process, *Call for Collaboration*, followed by *Market Insights* of our own to give producers a taste of the type of export prospects we see out there. Then we offer a *Roadmap for Collaboration*, how we propose to promote exports by showcasing farm-profiles, while we take on the task of identifying prospects through market-research efforts.

Then we turn to the nature of direct-sales, focusing on three more topics. We start with *Risks and Rewards*, trade-offs producers face and how they can mitigate trade-risks. The next article on *Specialization* deals with the scale-factor, how contract sales opportunities will be open to producers of all sizes to participate in. This is followed by our outlook on *Industry Structure*, with many new players emerging.

We conclude this volume with two articles on next-steps. The first presents our *Research Agenda*, where we will focus our efforts in the coming months: global competition (emerging and developed regions), regional-markets we concentrate on (mostly Asia Pacific), crop or industry segments we will target. Finally, we turn to *Recasting our Global Image*, with a focus on our region's advanced production-capacity and crop-variety to meet the needs of discerning grain importers.

We close with a few pages on *Next Steps*, activities we will focus our efforts on in the coming months to grow our following and deepen engagement on the part of producers, our primary audience. In particular, we highlight six set of activities: market-research, portal-following, producer-meetings, farm-profiles, export-image and buyer-targets. We conclude this agenda with a call on our followers to generate support to our cause from producer-associations and government-agencies.

We will continue to report on our progress and findings on a regular basis, posts every few days on different topics and action-items. We hope that you will follow these posts and respond to our new campaigns to advance our mutual cause. In the meantime, please do not think that we are ignoring the execution prong of our mission -- grain-handling and container-logistics. We have a lot on the go in this respect, capacity-development, which we will be reporting on periodically.

I. Prairie Agriculture at Crossroads: Specialize or Perish

Over the last three decades the Prairie grain-economy has undergone a fundamental transformation with noteworthy gains. Grain output increased by 50% and export volumes by 60%, even more in value by diversifying to higher value crops. There is a tendency to attribute all these achievements to market-liberalization, through deregulation and privatization. These policy reforms made the Prairie grain-economy highly market-driven, but much more of the credit must go to producers.

By embracing latest advances in agronomy and technology, producers increased their crop-yields and diversified their crop-mixes -- first to canola in a big way, and later pulses, at a smaller scale but higher value. Farms have become much larger through persistent consolidation, with advanced farm-machines in the fields and larger storage facilities, using much improved seeds, fertilizers and pesticides, while refining farming-methods and embracing new farm-management systems.

All these advances and achievements have given producers a sense of comfort and security, which is justifiable but should not mask the looming risks on the horizon. Despite all the diversification, Prairies are still too dependent on staple-crops that in turn are captive to bulk-trades. Wheat-exports are down from 85% to 50% of the total but only to be substituted by another bulk-crop, canola. These two crops now account for 75%, while 85% of crop-exports though the West Coast are still in bulk.

These bulk-trades are exposed to increasing competition from emerging-producers. Moreover, China has been the main driving force behind global demand for grain-exports, with its share of global trades reaching 20%. Now China is trying to become more self-sufficient and increasingly turning to emerging-producers to its west to meet its import-needs. These trends are likely to dampen demand for our bulk exports, pushing prices down and in turn squeezing producer-margins further.

This comes at a time when producers are already under pressure to increase their margins to pay-back the debt-overhang from years of investment, be it for land acquisitions or equipment purchases. Their only salvation is diversification to higher-value crops that can yield higher margins outside the web of grain-companies and their bulk-trades. In this vein, however, they face a dual-challenge -- lack of direct-sales and containerization channels, which is our mission to help them overcome.

While a sense of unbridled optimism still prevails, particularly among politicians and vested grain-industry interests, the time has come to interject a sense of realism over our export prospects through traditional bulk-channels. The Prairie grain-economy is stuck in a bulk-trap, with low-margins which are likely to get squeezed even further. The time has come for producers to think about alternative sales-channels to increase their margins -- future prospects in bulk-trades are grim.

Export growth and diversification

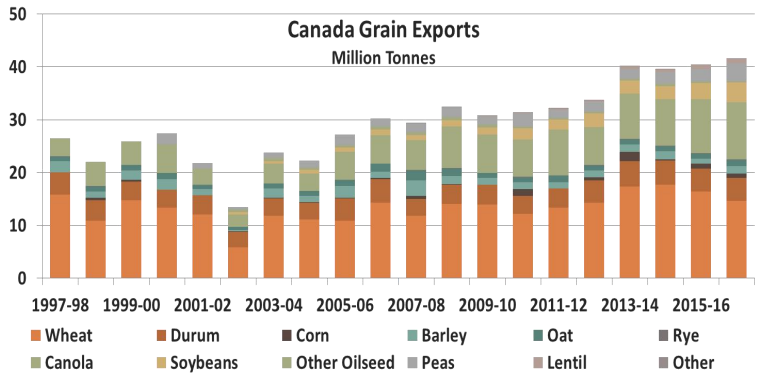
Our largest grain export is wheat, 20 MT 25 years ago and still about the same, but down from 75% to 50% of the total. Total exports increased significantly over this period, by close to 60%, with a fairly wide range of crops in the mix -- soybean, pea, lentil, barley, corn and oat. But the most significant growth was in canola, exports reaching 10 MT. Now two staple-crops in our grain export basket, wheat and canola, represent a 75% share -- next largest shares, soybean and peas, less than 10% each.

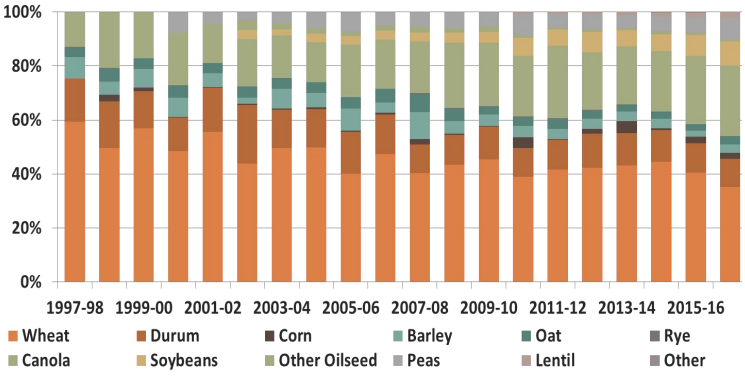
Perhaps the grain-economy is in much better shape now than 25 years ago; we are exporting 60% more and at least two crops account for 75% share instead of just one. Also, the remaining 25% is more diverse with higher value crops in the mix. Still, we cannot overlook our vulnerability in relying on just two staple-crops with such a large share, both exported through bulk-channels. Even in other crops, we rely too heavily on bulk-shipments, as much as 85% of all grain-exports through the West Coast.

We can be proud of the quality of our export-staples, but as long as we consolidate them in bulk we cannot differentiate the specialty types and grades that tend to fetch higher prices in world markets. Bulk-trades of most crops are vulnerable to increasing competition from emerging growers with a much lower cost-base than us to compensate for the lower yields they achieve. We already see China, by far the largest importer on the world scene, turning to the emerging grain-belt to its west.

We must also recognize that rapid export growth we have enjoyed was largely driven by imports from China -- more than 60% of the growth in recent years, now taking 20% of our exports, single largest destination. As China tries to become more self-sufficient, tries to limit imports to specialty grain varieties and grades, and turns to emerging-regions for most ordinary grades, our bulk-exports may be in peril, particularly in view of the fact that canola accounts for half our exports to China.

We may not own up to it, but the *bulk-trap* our grain-economy is in poses serious dangers to our export prospects. Our grain handling systems are geared to bulk-trades, while our direct-sales and containerization channels are woefully inadequate to facilitate the diversification of our export-mix to higher-value varieties or grades.





Farm consolidation and advancement

Rapid output growth the Prairies enjoyed has been due to yield increases -- driven by science-and-technology applications, more or less on the same land foot-print. Latest farm-machines equipped with positioning, guidance, spreading and sensing devices introduced increasingly AI-driven functionality, paving the way for precision-farming. Also, advances in crop-genomics improved seed-quality, coupled with applications of more effective fertilizers and pesticides, contributing to higher yields.

At the same time, the farm-economy went through massive consolidation. In the highly collectivized era farms were modest in size (typically 1,000-2,000 acres) but now mega-farms are quite common (20,000 acres or larger). Farm-size *per se* does not result in significant scale-economies, but makes technology more affordable for larger farms, where equipment can be utilized more effectively. Also, larger farms can diversify their crop-mixes more effectively by sectionalizing their lands.

Neither the farm-consolidation nor the advanced-technology adaptation we saw in recent years would have been possible without significant capital-investment on the part of farmers. In theory, the yield increases that were being achieved should have been adequate to pay for all this investment, but in practice revenues have not been commensurate with the capital outlays, be it for land-acquisitions or equipment-purchases. Farmers have been accumulating debt to stay on this advancement-path.

Contrary to common belief, we do not have sufficient data on farm-finances to pass judgement on the scale of farm-debt. Clearly, farmers still have enough equity to be able to continue to barrow from conventional sources through mortgages or leases. Lenders have not yet faced a serious default-crisis; yield increases have been steady with a long stretch of good crop years (only one poor one in 2002), but one severe draught (like the one we might be going through this year) can change all that.

At the root of the mounting *debt-load* is the margin-squeeze producers are under within the confines of today's grain industry structure -- captive to bulk-trades in the hands of grain-companies. Only if producers had the channels to diversify to higher-value crops, they could increase their margins, thereby pay down the debt they owe.

Industry structure and market-power

In the regulated era CWB had a monopoly on wheat and barley exports, and owned the terminal-assets (inland and coastal) to facilitate those exports. The farm-collection system (mainly country-elevators) was in the hands of provincial wheat-pools, collectively owned by producers. Into the reform era the primary policy goal was to liberalize the grain economy, by not only abolishing the CWB but also privatizing all the industry's assets, whether owned by CWB or the wheat-pools.

The faith in unfettered market-forces ran so strong that consequences of wholesale privatization was given hardly any thought, in the belief that no evil could come from a fully liberalized, market-driven grain-economy. However, these efforts resulted in a highly concentrated industry structure with a handful of grain companies holding considerable market-power, which they could exercise through the control they had over the bulk-system -- handling most exports, as much as 85% from the West Coast.

The faith in market-forces was not misguided when looked at from a broader global perspective. There were multiple sources of grain-production around the world, virtually across all continents, albeit with varying climatic-and-soil conditions, as well as agricultural knowhow and access to technology. But there was enough scope for intense competition in global grain markets to set prices in accordance to market demand -- grain companies operating in Canada were price-takers in world-trades.

However, the other end of the supply-chain was overlooked, giving grain-companies considerable buying-power in purchasing from producers -- what economists call an *oligopsony*. It was unrealistic to expect more than 100,000 farm-entities to get their fair share of the surplus from grain-trades when the buyers controlled the only bulk-grain handling-system. If producers had access to alternative sales and logistics channels, the outcome would indeed be different, driven mainly by market-forces.

These are the market realities that give rise to the *margin-squeeze* producers are under. The solution is not to revert back to the old system, by re-nationalizing the bulk-system, but to facilitate alternative sales and logistics channels, whereby giving producers a chance to shift to higher value crops they can export in containers.

Our mission: new trade and logistics channels

Proponents of the *status quo* stick to a *laissez faire* position to defend the prevailing system, refusing to acknowledge its shortcomings. Their premise is that producers already have the freedom to grow whatever they want; if there was demand for different types of crops that fetched higher value, they would be growing them. But if sales-and-distribution channels do not exist to reach export markets, they would be limited to feeding their own friends-and-family, at best their local communities.

The reality is that the way the grain-economy was privatized, with no regard to industry-structure, left the producers captive to bulk-systems in the control of grain-traders, squeezing producer-margins and limiting their choices to staple-crops that trade in bulk. Our mission is to push liberalization further through new channels, for Prairie producers to connect with end-buyers thereby further diversify their crop-mix in pursuit of higher margins -- a more market-driven, competitive grain-economy.

Prairies have already gone through a wave of diversification to pulses, like peas and lentils, by becoming a prime source for these high-value crops. There are further growth opportunities in pulses as well as many other crops -- new varieties and even specific grades of our staples (wheat, barley and canola). These crops are generally sold in smaller quantities to end users, requiring pre-export preparation, shipped in containers with their identity preserved (IP) without entering the bulk-streams.

With the growth in pulse-trades, new grain companies emerged specializing in this domain; the same may happen in other crop domains as well as new direct-sales channels. We will be pursuing all these opportunities but with a different business-model than traditional grain-companies that try to purchase at farm-gates. We will function as an open-platform to facilitate direct-sales between producers and buyers, while shouldering processing and containerization as a third-party service-provider.

Our core mission is to free producers from the *bulk-trap* they are in and the *margin-squeeze* that comes with it, by creating direct-sales opportunities that can leave them with higher-margins from grain-trades, thus higher-returns on investment -- thereby elevate the Prairie grain-economy at large to a more prosperous plateau.

II. Our Grain Economy Vision: Path to Producer Prosperity

In our previous featured article we noted the advances made in the Prairie grain-economy, achieving significant yield increases and export growth. Though often attributed to policy reforms, these advances were primarily driven by producer initiatives. But despite all the progress they made, producers could not escape the bulk-trap they were in with squeezed-margins. Our mission is to chart an alternative course to prosperity by opening up new export channels with higher margins.

The policy debate over the grain-economy has always been polarized, one camp defending the virtues of a collective-order and the other advocating privatization. The latter camp won over, which perhaps was an inevitable outcome of market liberalization pressures globally, but the process has gone unchecked without any safeguards. This gave rise to a highly concentrated grain-industry, leaving producers largely captive to bulk-trades with limited options to diversify to higher-value crops.

This same polarization now prevails over future prospects, some nostalgic of a bygone *collective-era* but with no options to claw back, while others sticking to a *laissez-faire* approach in the belief that market forces should take care of the challenges they face. We have a somewhat different vision for the future of the grain-economy: market-driven, but one that serves producer-interests through new export channels, thereby giving them opportunities to diversify to higher-value crops.

Before getting into our vision, let us first emphasize the perils producers face. For many, margins are already too thin to retire the debt-load they are carrying from past investments in pursuit of consolidation and advancement. These margins are going to be further squeezed as bulk-grain prices come under pressure from newly emerging regions that are achieving steady yield-increases. Producers are going to bear the brunt of these added pressures, not the grain-companies or traders.

The good news is that there are plenty of diversification opportunities for producers to escape the bulk-exporting-trap they are currently in, and to increase their margins. Prairies are endowed with some of the best climatic and soil conditions to grow a huge variety of crops. Producers have the most advanced farm-technology and agronomy-knowledge at their disposal, and possess the know-how to apply all these elements to grow higher value, identity-preserved crop varieties that are in demand.

The vision we are presenting here could be deemed radical or disruptive as the necessary trade and logistics channels are not currently in place, or at least not mature enough to give producers sufficient comfort. But they exist in other parts of the world, and all the elements are in place to develop them in our own backyard. This is a mission we are shouldering to give producers more choice in what they grow, together with market-research, trade-support and risk-management functions.

Value driven diversification

Against the background of significant yield increases and export growth it may be difficult for producers, particularly those who have expanded and modernized their operations, to relate to the necessity of an alternative path. Even though some producers may not feel the pinch, the overall debt-burden the farm-economy is carrying should be seen as a troubling sign. Even more worrisome is the future, looming competitive threats posed by increasing yields in emerging grain-regions.

Dwelling on the exuberance of sustained export growth, we tend to forget that 60% of this growth has come from China. Now that China is trying to become more self-sufficient, turning to the *New Grain Belt* to its west for most of its basic needs, one-fifth of our grain exports may be in jeopardy. Even when we mend our badly damaged trading relations with China, export prospects are going to be limited to specialty grades or types of grains, not what we have been exporting in bulk.

Our core mission of value-driven-diversification is not something new to Prairie producers. Even before CWB was dismantled, producers had seen the wisdom in diversifying from wheat to canola. Our wheat-exports did not decline but canola-exports reached half that volume; these two crops now account for 75% of our total grain-exports. Though canola generates higher export-proceeds in value, like wheat it is exported mostly in bulk, thus still yields relatively low margins for producers.

Still, canola added one more major crop to our grain-basket, reducing producers' dependence on wheat and more significantly adding more value to the provincial economies. In Saskatchewan's case (largest producer) in 10 years canola production reached 10 MT (compared to 15 MT wheat) -- increasing 300% in value to catch up with wheat, about $3 billion, with another $1 billion from canola-oil. Now with vast crushing-capacity increases contemplated, canola will also become a bio-fuel source.

The more significant value-impact came with the shift to pulses. Even at smaller volumes their value increased to $3.5 billion, in 10 years 700% growth in lentils and 200% in peas -- now more than either wheat or canola. Most importantly, these crops are handled outside the bulk-systems, opening up new channels for producers.

Pushing the envelope further

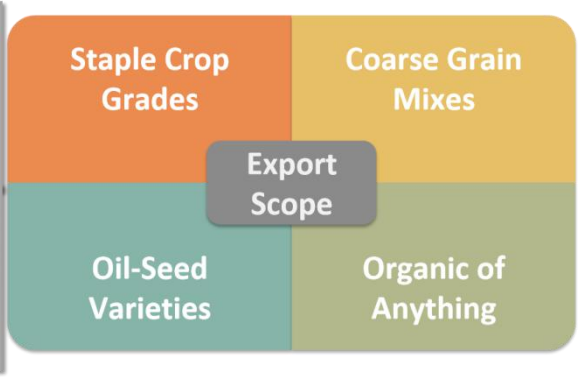
Addition of pulses to our export portfolio was indeed a momentous development, a turning point in value-recognition to diversify outside the bulk-cage. Pulses are still a small share of export-volumes (less than 10%) but in value as large as canola (at least for Saskatchewan) and yield higher producer-margins. Discovery of our virtues in growing these ancient crops was not accidental, requiring considerable research and policy support, but the benefits were indeed significant to the regional economy.

The shift to pulses got underway slowly in fear of market uncertainties on the part of producers, as well as bottlenecks in cleaning, processing and shipping. Early markets were domestic or at best the US, but in time a whole new industry segment emerged to service this domain. AGT, with access to Middle East markets, gave a huge boost to the pulse-sector, and the more recent takeover of a cluster of distressed assets by an old US grain-company, Scoular, will greatly increase our global market reach.

There is still huge growth potential in the pulse segment, but there are plenty of other promising opportunities to pursue in other domains, including varieties and grades of our staple-crops. Our wheat exports in bulk have been holding their own but with no appreciable growth as we have failed to target flour-milling trends for specialty-grades, even in durum that we are known for. Similarly we have missed out on new distilling and brewing trends that could have boosted our barley exports.

Another huge advantage we have is the diversity of our coarse-grains and oil-seeds. We tend to take the easy path of exporting whatever crops we grow in bulk, but there is greater value in targeting end-users, and exporting custom-mixes they need in containers, to create steady export flows into established supply-chains. We cite our past work in this regard in cereal and feed industries in China that had presented immediate export prospects, but there are many more such examples to pursue.

Our mission is to identify sales opportunities for producers to fulfil with specific types or grades of crops they grow, delivered to buyers' doorsteps in containers, be it processing or distribution points. Naturally, these opportunities will also be open to specialized grain-companies, like AGT or Scoular selling pulses or other crops.



Trade facilitation efforts

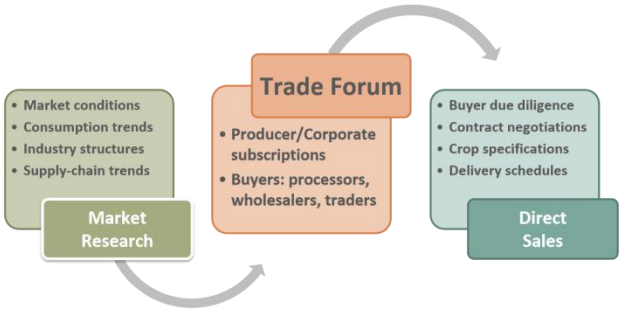
The realities of producer-finances attest to the diversification-imperative, while anybody familiar with the Prairie grain-economy can relate to the prospects of shifting to higher-value crops. But this is easier said than done as trade-channels do not exist to connect producers with potential buyers, let alone confirm sales orders to act on. Our mission is to facilitate these channels, which we firmly believe can be done, but it is going to take time, and moreover, producer engagement at the outset.

Grain-trades do not lend themselves to one-click-transactions; they require trust-building and a consultative approach to nurture to a point where buyers can be trusted with serious intent, and producers can take that intent seriously to enter negotiations to confirm order-details and delivery-conditions. The trade-forum we provide on our portal is just a starting point to get the process rolling, but it is going to take time and commitment on the part of producers to achieve meaningful results.

Initially we will be posting ideas and concepts, and publishing brief papers and presentations on our previous efforts in approaching overseas buyers for contract sales opportunities. But it is critical that we get feedback and further suggestions from Prairie producers, hopefully our primary audience in this portal initiative. Thus, we urge you to get involved in this consultative process to guide our efforts -- we are not looking for any commitment on your part, other than interest and participation.

Direct-sales are often mistaken for spot-sales, but in reality, regardless of their volume or frequency, such sales are not enough for producers to build their future on. Our mission is to turn direct-sales into sustainable trade-flows for producers to turn their attention to in search of higher margins. To this end, we firmly believe in extensive research into end-markets, not just consumption trends but also industry and supply-chain structures, which we will be publishing regularly on our portal.

We urge you to follow what we post or publish in this vein, and provide not only comments on the material we produce but also suggestions on how we should guide and prioritize our future efforts. Thus, our mutual success in creating diversification opportunities hinges as much on your participation as our commitment to the cause.



Grain industry landscape

What we are proposing here, and will be pursuing in the coming months and years, can be characterized as an ambitious strategy in pursuit of transformative change in the Prairie grain-economy, first and foremost guided by producer interests. We believe these changes are necessary for producers to increase their dwindling margins from today's staple-crop-exports, and guard themselves against declining bulk export-volumes under increasing competition from emerging grain regions.

We are fully committed to our mission but expect resistance from vested interests, particularly the incumbents in today's grain-industry that are dependent on bulk-trades. The same way as producers have to diversify their crop-mix to prosper, grain companies have to adjust to increasing specialization in grain-trades, shifts away from bulk to containerized exports. North America had long embraced direct-deliveries in trucks or rail-cars, and the same is now happening globally in containers.

While our mission is to facilitate change in grain-trades, we want to emphasize that we purposely stay away from taking a direct interest in trading. We are trying to open up new sales channels for producers to partake in directly, but these channels are also open to trade or corporate interests, incumbents or new-entrants, whether they pursue them on their own or through our platform. At the end of the day, our primary objective is to create more competition to serve producer interests.

In many respects incumbent grain-companies are better positioned to shift to specialized crop domains than new-entrants, as they have the industry knowledge and global connections. Export growth through containerized channels may come from yield increases across the board, but in all likelihood will also eat into existing bulk-exports. But in our view bulk-exports are already vulnerable; it would be in the best interest of the incumbents to embrace change as early and urgently as possible.

It may sound strange that we are pursuing all this change only to give the mantle to the same grain-companies that now dominate the bulk-trades, but what stands in the way of producer-prosperity is captivity to bulk-trades. Even if the same grain-companies take dominant positions in the new grain-industry, there would be new-entrants creating competition, thus helping producers retain higher margins. Direct sales and containerized channels are inherently more contestable than bulk systems.

The new sales and logistics channels we are trying to open up are aimed at giving producers more freedom and choice to diversify to higher value crops. But as long as grain companies, new or old, bring sales opportunities that allow them to make similar margins, they may opt for farm-gate-sales as they do now. With respect to logistics services we offer, they will be as open to grain-companies (or traders) as to producers; they can utilize our services or opt for their own internal capacities. Our aim is to liberate producers from bulk-trades, so that they can diversify and prosper.

III. Trade Facilitation: A Call for Collaboration

Our fundamental thesis is that producers are under a margin-squeeze that in turn gives rise to an imperative to specialize in higher-value crops. This basic reality is shared by most producers, but of course, the difficult part is rising to the challenge. Rather than just talking about them, we must identify "real" opportunities, like crop varieties that are in high demand, and pursue them through direct channels that reach out to export markets. To this end, we are calling producers to collaborate.

Some would claim, if there was demand for all these high-value crops, direct-sales channels would have formed already to unleash the grain-economy's diversification potential. At the root of this conundrum is a simple fact: markets do not function without information. In today's market environment producers do as poor a job in articulating their virtues in what they can grow, as buyers in signalling what they need. The grain-economy needs more *information-exchange* to facilitate trade.

Living in the Internet era, naturally this challenge should be approached through an online portal. But in order to be useful, this portal must go beyond a web-listing of what the Prairie producers can grow to match with what importers around the world need -- the respective lists would not go much beyond wish-lists ignored by counter-parties. What is needed, and what we are striving for is a platform where both parties actively interact with information on their respective capacities and needs.

We have all witnessed the of advent e-commerce in consumer goods, where retailers or manufacturers had no difficulty selling merchandise through online-portals. Consumers have a pretty good idea of what they need or want, can go online and find what they are looking for at lowest possible prices. There are hardly any mysteries in what they see in catalogue-photos; the only challenge is in making price-quality trade-offs that boil down to branding and reputation of merchandisers.

In many intermediate-goods, the same process works for many standard parts and supplies. When it comes to custom-designed parts or equipment, things get more challenging as suppliers have to adhere to buyers' specifications and features in what they make and sell. But even in these cases most transactions can be done online to meet contract specifications once sellers and buyers develop relationships. Also, manufacturing and delivery progress can be monitored and managed online.

The nature of agricultural trades is very different. Crops range in quality and attributes; despite all the advances in science and technology, producers do not have full control over what they grow as manufactures do in what they make -- weather being a prime source of uncertainty. Thus, catalogue-sales is not an option, but still, a great deal can be done online through a collaborative approach to establish closer contacts and develop more flexible trading-practices between producers and buyers.

Lessons learned from online portals

Over the last two decades many global supply chains have been revolutionized by the Internet -- integration of production-chains and sales-portals to reach customers. Consumers can buy whatever they want from online-portals and get them delivered to their doorsteps. Perhaps it is not as visible but behind the scenes production-chains have changed, advanced and integrated to an even greater extent -- dozens if not hundreds of parts in everything manufacturers make and sell to their customers.

We wish things were as easy in the grain-world, but still, there is a lot of potential for online portals. Agronomy and technology advanced greatly to allow farmers to grow crops with specific traits, almost to a point to be contemplating a *grow-to-order* model, but not all challenges have been overcome. We are convinced of the virtues of online-portals in facilitating grain-trades, but we must recognize and adjust to the fundamental differences between agricultural-trades and manufacturing-sales.

We first conceived our portal as *Alibaba-for-Farmers.* Working in China for two decades, we had followed the development of the Alibaba-platform and witnessed how it had given a life-line to small-medium-size enterprises (SMEs) -- often overlooked in the shadows of corporate giants (MNCs and SOEs). Unlike other e-commerce and social-media platforms, Alibaba had painstakingly nurtured links between buyers and suppliers -- we saw similarities between the latter and farmers.

Building on our North American experience we worked on various industry segments, particularly electronics and automotive, where e-channels had transformed industry-structures and integrated supply-chains. Online platforms were also very helpful in one-stop procurement-fulfilment efforts for large projects, like hotels and airports. Even in specialized industrial-equipment (like mega-transformers) suppliers used online platforms to manage sales, production, delivery and installation functions.

The main lesson from all this experience is that portals deployed in e-commerce, even SCM, are of little value for grain-trades -- limited scope for one-click solutions. What we are striving for is a platform where producers actively engage to profile their capacity, which we can then promote to potential buyers in targeted markets. Then the portal will facilitate these linkages to evolve into contractual engagements.

Main roadblock in our way

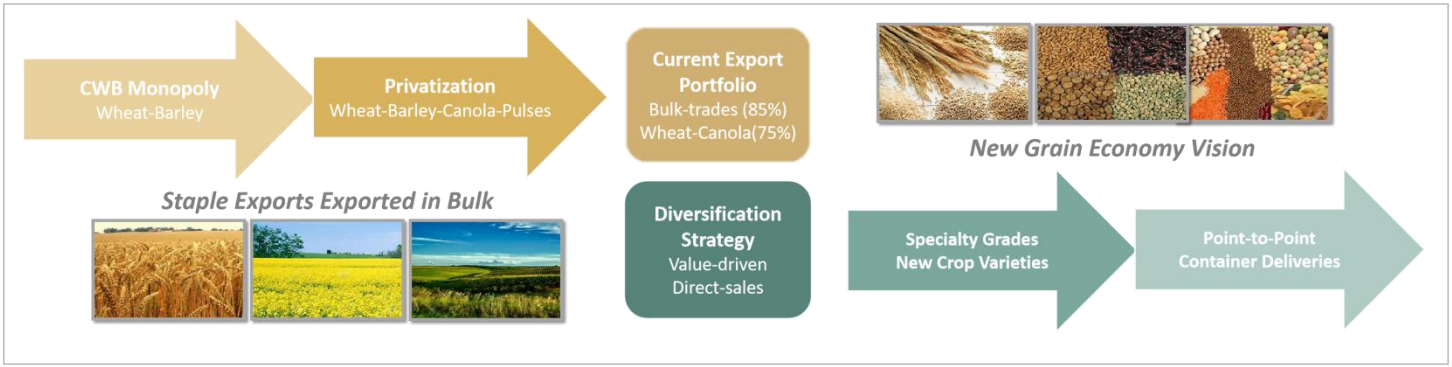
Since our core mission is trade-facilitation we devote considerable attention to the topic throughout our portal, but given where we are at these early stages there are no sales in the offering, let alone done-deals to report. Hopefully, we at least make a convincing case that our grain-exports are not doomed to be trapped in bulk-trades. Our *raison d'etre* is to shift away from bulk-trades to specialty-crops, export-sales facilitated through direct channels and fulfilled in containers to final destinations.

We are convinced of the viability of the course we are on, diversification to higher-margin crops -- the only way to liberate producers from their dependence on staples and the low-margin bulk-channels they are exported through. Thus, producers are our principal stakeholders, but in order to open up new markets for them, we have to attract buyers, and there lies our main obstacle. We know the Prairies have the capacity to grow a huge variety of crops, but the world is not aware of that potential.

Canada is a major producer and exporter of grains, but on the world stage we are primarily known for our staple-crops -- wheat representing 50% of our exports and canola another 25%. But both these crops are exported in bulk; with other crops, 85% of our exports are in bulk, at least from the west-coast, our only "gateway" to Asia Pacific markets that we are focused on. Those responsible for export promotion may take umbrage but the world does not know much more about our virtues.

With the dismantling of the Canadian Wheat Board it was taken for granted that the marketing-responsibilities would go with the privatized assets, and indeed they did. Private grain companies had already opened up new trade channels for canola, and added wheat and barley to their portfolios. It was overlooked that their vested interests were in bulk-trades, with little incentive to diversify the crop-base. This changed with pulses, but the vast share remained in bulk -- what are known for.

The first challenge we face is promoting the virtues of Prairies as the world's best grain-growing region, with all the advanced scientific and technological capacity to grow a huge variety of crops to the highest standards that the world has ever seen. We need producers' active participation in our portal to demonstrate this capacity -- suggestions through our *Trade Forum*, and *Farm Profiles* to display advancement.



Stakeholder role and participation

Our portal is developed to serve producers, to pave the way for what we coined the *path-to-prosperity*, but there remains a formidable "roadblock" in our way. This can only be removed through active participation on producers' part to promote our virtues in growing specialty, high-value crops -- in other words, demonstrating our production capacity. Since there is little scope for one-click-sales prospects in this domain, trade facilitation can only be achieved through a collaborative process.

As the first step to this end, we are urging producers to participate in our ***Trade Forum***, by simply posting the opportunities they see and the new crop varieties they are interested in pursuing. These can be specialty grades of our staple-crops (wheat, canola or barley), all types of pulses as our region's most lucrative crop-group, other coarse-grains or oilseeds you see potential in. Alternatively, we also have potential in organic-of-everything, but we would like to hear your views on the matter.

At these early stages, even a more valuable way you can participate in the process is by volunteering for a ***Farm Profile***. As we describe under our Prairie Profile tab, we want to post a series of these profiles, which we believe is a very effective way of promoting our region on the world stage. All you have to do is provide your consent to participate, and forward some material -- photos of field images, farm machinery, storage bins, brief description of systems you use and anything you want to highlight.

If you have a website of your own, you can reference it in your "profile", but by next spring we also plan to host ***Member-Pages*.** This may be an alien concept to online portals, as they tend to take a commission from vendor sales. But recognizing their virtues in B-to-B trades, Alibaba had introduced this practice to great effect. These sales or contracts tend to involve direct buyer-seller contact in facilitating custom orders -- we intend to follow the same as we have no interest in trade-commissions.

We will rely on your *Trade Forum* suggestions to guide our priorities in market-research efforts (which we will get to next). Once we build up enough *Farm Profiles*, we will turn our attention to reaching out to potential buyers in targeted export markets. We believe displaying the capacity of our producers would greatly enhance the *Prairie Profile* we plan to start promoting aggressively as of Spring, 2022.

Our role with market insights

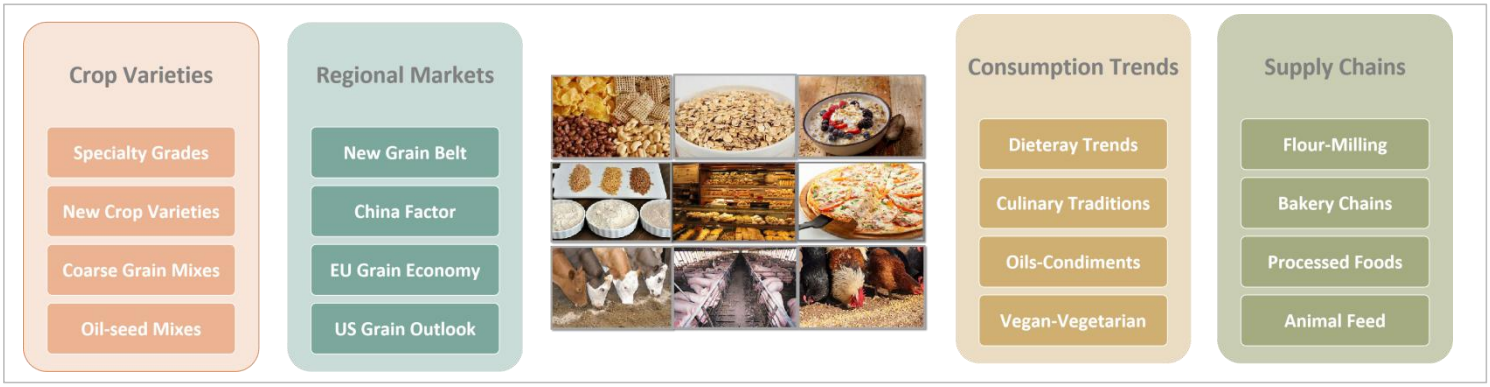
An important part of our mandate is to bring attention to new export opportunities through the market insights we provide. The traditional market-research domain is mostly confined to export volume and price trends, which are available to producers through many other sources. But our insights are driven by the market research we conduct into consumption trends, industry structures, and supply-chains -- which we believe are the more pertinent topics to focus on in search of export-prospects.

Our next featured article will provide an overview of our work from a few years ago. Based on a study of flour-milling industry and wheat supply-chain, we had identified export prospects for specialty wheat grades. Studies on animal-feed and breakfast-cereal industries identified opportunities in coarse-grain and oil-seed varieties that could be sold to leading importers in these industry segments -- custom grain mixes to be shipped in containers to specific destinations, feed-lots and cereal-plants.

We have other studies like this underway (and many more planned) targeting a wide range of industry-segments and supply-chains, backed by market-research into consumption trends driving demand in markets they serve. While our past work was mainly focused on China, we now intend to extend our efforts to other major markets across the Asia Pacific region. We would greatly appreciate your ideas and suggestions to guide this agenda -- crop-varieties, industries or countries to focus on.

We have a very ambitious market-research agenda to enhance our understanding of global grain trades, and our competitive position in those trades. We believe this is vital to producer-interests, in not only recognizing the risks they face in bulk-trades, but also in identifying opportunities to diversify through new export-channels. But so far we have not received much attention from producer-associations, nor from government-agencies involved in agriculture, trade or economic-development.

We need to galvanize more support from the producer-community, which we sense is there at the grass-roots, to put pressure on both the associations they belong to and government-agencies (federal and provincial) with policy responsibilities over the grain-economy. As part of our collaborative-approach to trade-facilitation, we are asking producers to lend support to our mission, directly or through our portal.



IV. Export Opportunities: Select Market Insights

In our quest to open direct sales channels for high-margin crop-exports we urge producers to engage in a collaborative process, which we will actively facilitate in the coming weeks and months with new ideas and concepts. To this end, we will embark on new market research projects, but at the outset we wanted to reflect back on our previous efforts to give our followers a taste of the export prospects we had uncovered. The same channels may still be open, or similar ones can be found.

Upon our return from Asia a few years ago, we observed the revival in agriculture with noteworthy increases in export volumes. China had become our largest grain-destination taking 20% of our total exports, but with a huge share of bulk-canola in the mix. Based on our knowledge of China's grain-needs, we knew there were much higher value export prospects that were not being attended to. We focused on three market segments where we saw promising contract-sales opportunities.

Driven by dramatic shifts in consumption trends, China's flour-milling industry had greatly advanced and consolidated, producing a wide range of higher-quality flours. As a result of yield-increases, China's wheat output had increased to become more self-sufficient but there was still a need for specific-grades of wheat, including durum. These were already in our crop-mix but we lacked the containerized logistics capacity to arrange for door-to-door identity-preserved-deliveries to designated flour-mills.

Another trend was a shift away from rice-porridge to breakfast-cereals, with a wide variety of grains in the mix. A relatively unknown private company had emerged as a market leader in breakfast-cereals, and had set up a plant in Australia to source coarse-grains for their leading brands. The market was still growing in double-digits, with potential to source even larger volumes of coarse-grains from Canada, crops already available in the Prairies but held back by lack of containerization capacity.

Much larger grain-export opportunities were in animal-feed, now China imports as much grain for this purpose as for food -- double the crop-volume we export in total. Significant increases in meat-consumption had given rise to a vibrant feed industry, with the industry-leader (integrated feed-meat-diary company) operating feed-mills across Asia. We had all the coarse-grains and oil-seeds they needed in our crop-mix but again lacked the containerization capacity to ship direct to their feed-lots.

Here we provide brief summaries of these past initiatives, and will be posting more detailed reports and presentations on these subjects under our *Global Markets* tab in the coming months. Given the dire state that our trade-relations with China are in, we are not sure whether these opportunities are still open, but even if not directly they will be there through re-export channels. In any event, these are the types of market opportunities we will be pursuing throughout other parts of Asia Pacific.

Wheat varieties for flour-milling

China produces more than 120 MT of wheat a year, 2nd largest wheat producer in the world behind EU, and sits on huge stocks (more than a year's supply). Though it produces more than it consumes, it still imports high-grades of wheat, about 4-5 MT a year. In the mid-2000s we were exporting as much as 2 MT of wheat to China, but recently this figure had fallen to 10% of that. Knowing that China still needed the types of wheat we produced, particularly durum, we wanted to find out why.

In the last decade the flour-milling industry had undergone huge changes, massive consolidation and technological advancement, now the modern mills grinding as much as 5000 T/day using fully automated technology. Advances were made in all aspects of the milling process -- extraction-rate, ash-control, particle-size, energy-efficiency. The 3 largest milling-groups, all operating mega-mills, now have the capacity to meet mass-demand, still with room for boutique-mills for specialty flours.

Though China's per capita wheat consumption is not much lower than the US, their wheat flour use profile is very different. In the US bread accounts for more than half the flour use, cakes-cookies for another 40%. In China bread accounts for less than 5% of flour demand, cakes-cookies another 25% – steam-bread, dumplings, noodles dominate the market. However, this profile is rapidly shifting in favour of western foods (bread, bakery-goods, pasta, pizza, etc.) changing the type of flours in demand.

These new food trends are giving rise to higher-quality specialty flours that advanced millers are starting to focus on to satisfy market demand. Advanced mills consist of multiple milling-lines, configurable (wheat intake, process, product attributes) for specialty flours. The challenge for millers is the wheat intake; domestically grown wheat is adequate for the types of flour needed for traditional foods, but sub-par for baking, western-style breads, and pastas, requiring imported wheat-varieties.

Among the needed varieties (to be blended with local grades) are hard-red (western style bread), soft-white (cookies and baked goods), and durum (for pastas). These are wheat varieties that we grow, but all our wheat exports are in bulk, while China's major floor-mills want them delivered identity-preserved and in containers, and shipped in regular intervals (weekly container-lots) to avoid keeping large-stocks.

Grain-mixes for breakfast cereals

With growing affluence and a booming restaurant industry, China's eating habits were changing profoundly. Disposal incomes were rising steadily while all segments of society were spending more on food, eating-out as well as home-cooking. While traditional cuisines were being revived and refined, western influences were also evident. These trends were felt across the whole spectrum of food-ingredients, not only wheat-flour, which we touched on above, but even breakfast-cereal contents.

Breakfast is a full-meal in China, followed by not just 2 but 3 more in the course of the day. For many it can be a feast with a variety of dishes, including stuffed-buns, dumplings and even more elaborate ones. But a basic breakfast consists of con-gee, rice-porridge, often with other ingredients thrown in; it can be freshly boiled from regular bagged-rice or left-over cooked-rice. Now there is a trend to replace this staple with cereals mixed with soy or regular milk, tastier and more nutritious.

With a vast new market emerging, a number of new companies have staked out the packaged cereal market. The largest among this new breed of cereal-producers is in Guizhou (south-central China) -- a family-owned private company but with a minority stake held by a global grain giant. In addition to processing-plants and distribution-centres across China, the company has a cereal-plant in Australia, procuring grain varieties and shipping packaged-cereals in containers to be distributed across China.

Australia is known as a major source of coarse-grains, main ingredients for breakfast-cereals, but we are just as good if not a superior source in quality as well as variety. What we produce in this domain is mostly consumed in North America with limited exports, while the main barrier to growing more to export is lack of containerized shipping services. Also, sailing-times from Canada to China are "days" rather than "weeks" from Australia -- just looking at flat-maps may be deceptive in this regard.

Looking into this market we saw a real potential in exporting breakfast-cereal mixes (mainly of coarse-grains) in containers. Just targeting the industry leader in this market, volumes were not as large as specialty grades of wheat but still could reach 50-100 containers a week. There were also value-add opportunities in cleaning, processing and custom-packaging for grain exporters or other intermediaries.

Custom feed-mixes for husbandry

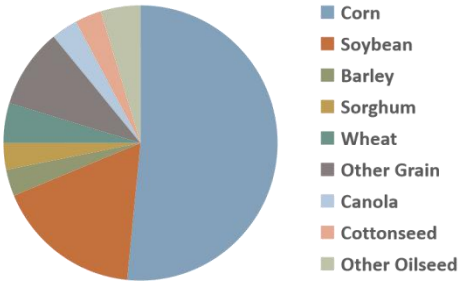
An obvious manifestation of growing affluence was increased meat consumption, making China the largest meat-producer in the world. Poultry, beef and diary consumption increased 8-10 times; even pork, already high to begin with, increased 3 times. China now accounts for 50% of global pork consumption, 20% of poultry and 10% of beef, but per capita meat-consumption is still below the world-average, particularly in beef far below Brazil or US, with much more growth yet to come.

Together with a fairly advanced husbandry and meat segments, a whole new feed-industry was born. Naturally animal-stocks had to be fed; initial reliance on farm-sources and scraps gave way to what USDA calls the manufactured-feed industry -- tripling its output through the 2000s, still growing 10% annually. At the same time, this highly proliferated industry went through massive consolidation with top-10 producers gaining 30% market-share -- the industry leader now with 15-20% share.

USDA estimates that China's grain-needs for animal-feed is approaching 300 MT/yr, about the same as for food and double the amount US uses for feed. The main feed-staple is corn (50%), followed by soybean (20%), with the rest made up of barley and other coarse-grains as well as oil-seeds (mostly crushed-meals). Corn is domestically grown but the rest have significant import-content. USDA draws attention to the fact that feed-needs will be the main grain-import-engine for US producers to focus on.

The feed-industry leader was among China's first private sector giants, focusing on agriculture and food sectors along the way. Now it is a sprawling horizontally and vertically integrated conglomerate, with operations extending across Asia, Europe, Africa, Australia, and New Zealand. In addition to its husbandry, meat-processing (pork, beef, chicken) and diary operations, it is by far China's largest feed-producer with feed-mills across China as well as other locations in Asia (Russia and Vietnam).

We had targeted this company in the hope of exporting custom feed-mixes to their major feed-lots across China, weekly container loads with the particular grain-mixes at different locations (be it cattle, swine or chicken). This was going to require a new facility in the Prairies, which the buyer would build and operate, with us shouldering the sourcing and logistics components of the chain (including deliveries in China).



Many other opportunities to pursue

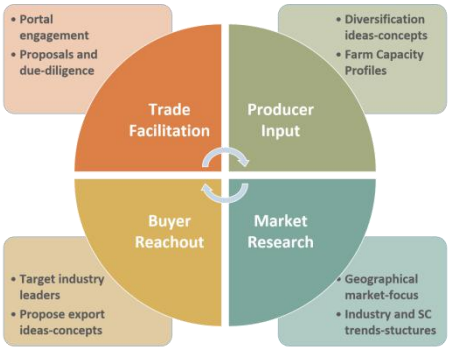
Our short-lived start-up venture had focused on only 3 buyers, all industry leaders in their respective market segments. Even at this limited scale we were targeting a base-load of 500 containers a week, almost 1 MT of exports, only a fraction of these companies' grain intake. Also, there were other buyers to go after in each of these market segments -- in flour-milling, our target was only one of 3 majors; in feed and cereals our targets were the largest but with many others with similar needs.

As we were pursuing these three targets, there was another under consideration -- malting barley. China had become the world's single largest market for beer, as large as all of EU combined. While the mass market was in the hands of global giants and their Chinese counterparts, a craft-brewery sector was mushrooming, ironically many of them in the hands of Canadian-expats. The supply-lines were difficult to navigate, thus we had left it outside our start-up scope, but it is there to pursue.

Our venture was stalled as Canada-China trade relations deteriorated, with an all-out trade-war pending. However, neither of these companies, nor their grain needs vanished. Canada-China trades may resume, but even if they do not come back as strongly as they once were, the same prospects can be pursued through indirect re-export channels. In any event, our past work could serve as templates for other initiatives, to pursue similar market opportunities across the Asia Pacific region.

Our efforts in the coming months will tackle many more geographical markets, with the two large, mature economies, Japan and Korea on top of our list. These two are eager to containerize their grain-import channels, with many other industry or market segments to target. Also, on our list are Thailand, Philippines, Malaysia, Vietnam and Indonesia; though all these are grain growing countries, and are within reach of Australia, there are many crop niches or grades to identify and pursue.

As we stressed before, trade-facilitation is a collaborative process, where we need the direct participation of our stakeholders, producers -- support our efforts with suggestions and sign-ups to Producer-Profiles. Once these profiles are posted, we will start our campaign across Asia Pacific to attract interest from buyers. Our next featured-article will focus on how we see the trade-facilitation process unfolding.



V. Trade Facilitation: A Road Map for Collaboration

In previous articles we discussed the nature of grain-trades, and how they offer considerable scope for specialization and crop-differentiation. We embarked on our portal to leverage the Internet, not to generate one-click instant-sales but in a "trade-facilitation" capacity. Essentially, we are providing an information-exchange platform that will allow producers to display their "capacities" and buyers to express their "needs", thereby paving the road to trading-relations and contract-sales.

To this end, we are calling on our primary audience, Prairie producers, to engage and participate, to turn our portal into a collaborative endeavour, the only way we are going to make the portal effective in serving their interests. We are looking for their comments and suggestions, but even more importantly, their consent and input in showcasing their production-capacities through *Farm Profiles*, which we will post to extol the virtues of the Prairies as the world's most advanced agricultural region.

As we pointed out earlier, Canada is known around the world for our grain-staples, which we export in bulk, not for our advanced capacity to grow higher-value crops that are in demand globally. Generally such crops can be sold directly to end-users, and delivered to their doorsteps in containers with crop-integrity intact. We believe this is to be the most promising *path-to-prosperity,* but formidable barriers stand in the way, mainly the lack of direct-sales and containerized-logistics channels.

Our portal is designed to remove these barriers standing in the way of producer-prosperity -- a novel trade-mission to further producer-interests, to liberate them from captivity to bulk-trades. But we must emphasize that this is not a conventional sales-portal that is going to generate spot-sales to get rid of what producers already have in their bins. It is a trade-facilitation portal to open new market opportunities for producers to specialize and diversify their production-base in future crop-years.

At the outset we should stress that results are not going to come instantly. There is a rather arduous process we must go through, by first identifying promising market opportunities (high-margin but low-risk), then demonstrating production-capacity (advanced and high-quality), and developing the logistics-channels (reliable and cost-effective) to meet end-user needs and requirements -- at a premium-price that buyers can justify based on superior crop-quality and reliable supply-arrangements.

Despite all the advancement in agriculture, producers remain captive to bulk-trades, which are in peril from competition from emerging regions, intensifying the margin-squeeze on producers. One way out of this trap is through the specialization course we chart, but we cannot accomplish this mission alone. We need more participation and engagement from the community we serve, the producers, and here we make yet another call for "collaboration" along the path we will pursue in their interest.

What we need from producers

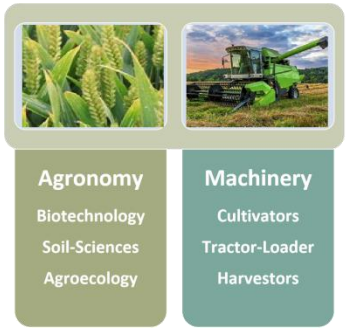
It should be obvious from our portal, as well as the articles we post, that we are not selling anything, nor intending to make money from the crops you sell. Our mission is trade-facilitation, one of "advocacy" in producer-interests, not commission-sales. In just a couple of months our following has reached 3-digits, on a path to 4-digits by year-end, but we only have a handful of producer sign-ups. We would like producers to understand that our mission is in their cause, thus invite them to participate.

This starts with producer *sign-ups*, not to receive sales-pitches as we do not have anything to sell, but to take part in a collaborative process. As a first step, we are looking for comments and suggestions on our trade-facilitation efforts. While we are advancing ideas and concepts on how to diversify the grain-export portfolio, away from bulk-trades to higher-margin direct-sales, naturally producers are much better informed in this regard -- what they can grow and where they see export prospects.

More importantly, however, we are inviting producers to step forward to showcase their farming operations -- methods, practices, technology, systems, etc. The *Farm Profiles* we want to post are of critical importance in promoting the virtues of the Prairies in export markets -- the region's unmatched production capacity, especially when it comes to specialty, high-value crops. We are shouldering the efforts in preparing these farm-profiles but we need input and material from producers.

Government-agencies and producer-associations constitute important elements of the institutional-infrastructure of the Prairie grain-economy. Their role in today's market-driven economy is very different than in the regulated-era, but still from all angles these agencies shoulder vital functions. When we first launched our portal we tried to reach out to as many of these agencies and associations as possible. Understandably, response was not overwhelming, as we were new and unknown.

We are well aware of the fact that the onus is on us to earn credibility and trust, by demonstrating that we do not have a hidden commercial agenda; we are here to serve the best interests of the producer community and the grain-economy at large. Any support we can get from producers, by posting or commenting on our website and actively participating in farm-profiles, would help rally institutional support.



Canada's record and reputation

Canada's global image is one of a bulk-grain exporter. We are known for the quality of our export-staples, and the credibility of our grain-traders, but we cannot escape the reality that 85% of our grain-exports from the West Coast are in bulk. Even part of the residual 15% shipped in containers is an overflow from bulk-systems, a means of convenience across the Pacific to utilize empty boxes, not *bona fide* containerized exports of specialty high-value crops, door-to-door identity-preserved shipments.

The recent shift to pulses, still not huge in export-volume but significant in value, is a shining case-study of high-value crops that are exported in containers. We were quick to show the world that the Prairies had the best growing conditions for these ancient crops. Many producers shifted to pulses, with a partnership between a local grain-company and an overseas importer achieving significant export-growth to the Middle East -- similar potential exists in other Asian markets across the Pacific.

The story of another highly popular crop in our export staple basket, durum that we have a stellar reputation for, has not been as bright. Failing to follow end-market trends and containerize, we were left behind in Europe, where demand was shifting to more differentiated grades. We also missed out in China, a newly emerging market with even greater potential. Our record in other specialty wheat varieties (hard-red and soft-white) or barley (another staple crop) has not been much better.

The biggest export diversification-wave came with canola, increasing from modest volumes to half as much as wheat-exports. Though leaving higher margins to producers and more value to the grain economy, canola exports were also trapped in bulk-systems, with close to half going to China. We have become the world leader in canola, but recognizing the vulnerability of our exports, we are now contemplating alternative uses like bio-fuels -- instead, we should be thinking of higher-value crops.

More or less on the same landmass, we increased grain production and export-volumes as much as 60%, mainly as a result of yield-increases driven by scientific and technological advancements in agriculture. Now we have to leverage this capacity to diversify our crop-mix, and show the world that Canada now has a "new" grain-economy in the making, with higher-value crop grades and varieties in the offering.

Remaking our image in global markets

We have every right to be proud of our recent achievements -- yield-increases and export-growth driven by advances in farming methods and technology. At the same time, however, we have to be cognizant of the competitive threats our bulk-exports are under. As a high-cost region we are vulnerable to competition from emerging-regions in meeting the ordinary grain-needs of the world. We must move away from bulk-trades to a path of deliberate value-driven diversification and specialization.

To this end, we face a formidable challenge in remaking our image in global grain markets. Nobody can take away from the quality of our export-staples that the world knows us for, but we also must make a concerted effort in showing the world that our greatest strengths lie with our advanced production capacity. We have the science and technology to draw on, and the knowhow to put them to use in practice to grow specialty crops, be it new varieties or special grades of our export-staples.

We tend to rely on our export-statistics and images of bulk-facilities in promoting our grain-economy. But the importers we are trying to reach out to have little interest in these virtues, as they already know our stellar reputation in bulk-exports. Instead we have to focus on our producers' capacity to grow specialty crops that discerning end-buyers need, and are willing to pay a premium for. This is why we put so much emphasis on *Farm Profiles,* to display science-and-technology in action.

The farm-profiles we post may speak for themselves, but we need to go a few steps further to demonstrate continuing advancement in Prairie agriculture. Farmers have cutting-edge research capacity to draw on in agronomy, particularly genomics. Also, not content with the technology they have in the fields, they continue to invest in latest machines, positioning-monitoring devices, and management-systems. Also, we have the most refined classification and testing systems for quality assurance.

We will continue to update our *Prairie Profile* tab with new material to convey advancement in all aspects of science-and-technology, as well as sustainability. Our diversification capacity may be evident from our record in canola and pulses, but now our producers are ready for yet another wave of market-driven specialization, to meet end-user needs with specialty-crops delivered in containers, not in bulk.

Shifting the focus to end-markets

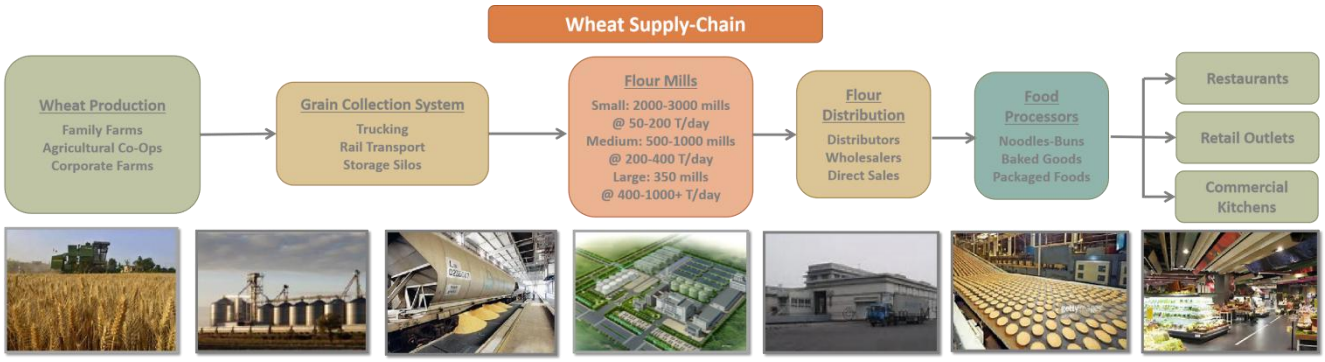
We shoulder the responsibilities of preparing the individual *Farm Profiles*, as well as the *Prairie Profile* on the region as a whole. The purpose of these "profiles" is to extol the region's virtues as the world's most advanced agricultural region that can produce the highest quality crops. These crops reach end-markets mostly through bulk-channels in the hands of leading grain-companies, but now their more specific grades and varieties will also be available to end-users through more direct-channels.

But our job does not end there; we shoulder the burden of promoting the Prairies to prospective importers, not ignoring traders or wholesalers, but mainly focusing on processors along specific supply or production chains. We target these efforts by geography, focusing on the Asia Pacific region where we see the greatest growth potential. We then delineate these targets by crop type or grade, and by industry-segment, or along supply-chains where we try to identify potential direct-buyers.

These targeting efforts require considerable background market-research, starting with the economic fundamentals of the countries we target, their agricultural-trade profiles, consumption patterns, feed and food market trends, as well as disposable-income and economic-growth trends. We then dig deeper into promising industry segments or supply-chains to identify reputable enterprises that could become direct-buyers of our grains in large enough volumes to warrant further attention.

Once we identify promising corporate targets, our discovery efforts go into the next phase, needs-analysis. This requires much deeper understanding of the markets the targeted entities operate in, and their particular position in those markets. In our previous featured-article we presented examples from our previous work, where we had identified an annual direct-export potential of close to 1 MT (1000 containers a week) from just three targets -- in flour-milling, breakfast-cereals and animal-feed.

We intend to conduct many more of these types of market-research studies, we believe to be the type of effort required to identify market opportunities for Prairie producers. Obviously, our resources are not without limits, even if we could tap into external funding sources. Thus, we need suggestions from producers as to where they see the greatest export potential in order for us to prioritize our efforts.



VI. On the Nature of Direct Sales: Risks and Rewards

The mission we embarked on to diversify the Prairie grain-economy is largely driven by the risks we foresee in our producers' dependence on (or captivity to) bulk-trades. There is a sense of comfort that comes to producers with recent achievements, continued yield-increases and export-growth. Generally producers have done well, but many among them face a debt-overhang that is not going to go away unless their margins increase, undermining their ability to invest and advance into the future.

Even more worrisome is the "future" of producer-margins from bulk-trades, which we fear are going to be further squeezed as a result of prevailing trends in global-markets. We tend not to pay much attention to these developments but crop-yields are on the rise in emerging regions, particularly across Caucasia and Central-Asia. These developments are not accidental; behind the agricultural revival of this vast region is China, with its *Road-and-Belt Initiatives* and farm-level support programs.

China became our largest grain destination, taking a fifth of our grain-exports, but now these trades are threatened with considerable uncertainty on the horizon. Even if our trade-relations could be repaired, China is turning to its west for grain-imports, cheaper sources of most of what they need, sources we would be hard-pressed to compete with. It is imperative that producers diversify away from grains exported in bulk, to specialty-crops sold direct and exported in containers with higher margins.

Our mission is to promote direct-sales, and to that end we have a two-pronged agenda to enable containerized-exports -- trade-facilitation and logistics-services. We are confident in the viability of our mission, which will facilitate higher-value and higher-margin exports, but we are not advocating that producers abandon bulk-channels altogether; it will take time for our "vision" to materialize, and there are risks associated with direct-sales that have to be carefully mitigated or managed.

Bulk trades have considerable appeal to producers; they can continue to grow what they are accustomed to and generally get paid at farm-gate with no trade risks. But we cannot be blind to global market pressures that may squeeze producer-margins further, even to a point where it is no longer viable to grow staple-crops in our high-cost region. The path we are advocating is not just driven by greed but may become a necessity; however, specialization and selling direct may come with certain risks.

One extreme example is growing an exotic crop, in the hope of finding buyers that would pay a premium for, but being left holding the bag with no buyers in sight. A more common risk is buyers reneging on contracts, and skipping payment after the order is shipped and even delivered. These latter trade-risks can be avoided or at least mitigated by insisting on advance payments or secure letters-of-credit, or conventional export-insurance remedies to spread trade-risks across multiple trades.

Virtues and drawbacks of bulk-trades

Before the containerized-era bulk-systems were the only means of exporting grains overseas. CWB had developed effective marketing and shipping channels to sell all the board-grains producers grew for export, while also providing price guarantees to ensure producer well-being at times of poor harvests or slumps in global markets. With CWB's dissolution and privatization of its assets, it was hoped that producers would do even better with multiple grain companies competing to buy their crops.

It is debatable whether market liberalization efforts achieved the desired industry conditions for producers to get a fair share of export-proceeds, but we have little interest in dwelling on these matters. Export volumes increased and producers did fairly well; our main concern now is the system's future prospects. We fear that our bulk-exports are going to come under increasing pressure from emerging grain-growing regions that compete from a much a lower cost-base than our Prairies.

We have to make an effort to wean our dependency on bulk-exports by specializing in higher-value crops, which tend to sell in smaller quantities and are not conducive to bulk-handling. We have the capacity to grow crops with highly specific attributes that could fetch higher prices in export markets, but they have to be sold to end-users through direct channels and delivered in containers to preserve their identity. This transition cannot happen overnight and comes with certain risks to producers.

A grain-economy reliant on bulk-systems brings considerable comfort and security to producers. The grain companies, custodians of bulk-systems and the trades they serve, are the main purchasers. This gives producers some choice in what they grow without having to worry about crop attributes, at least not as much as in selling direct to end-users with specific requirements. Most importantly, grain companies buy under contract and pay reliably, protecting producers from any trade-risks.

It is tempting to stick to the *status quo* to avoid the risks that may come with further specialization, what we are calling for. But to guard themselves against declining staple-export prices and volumes, producers must start thinking about reaching to new markets. As bulk-exports come under competitive pressure, producers will bear the brunt of the margin-squeeze, not the grain-companies with more market-power.

Risks associated with direct sales

The alternative path we provide through direct-channels has much greater revenue and margin prospects for producers. However, they bring certain production-burdens and trade-risks that producers have to be cognizant of and manage to protect their interests. There can be little doubt about the potential rewards that could come from this *paradigm-shift*, but it is not as easy as growing the staples grain-companies are willing to buy and assume the risks beyond farm-gates.

At the production end, scientific and technological means are there to grow a much greater variety of specialty grades or types of crops, but there are many factors beyond producers' control, weather conditions being first and foremost. Also, the word "specialty" implies certain attributes that buyers look for but are not as easy to achieve in the fields as on factory-floors or construction-sites. Precision-farming has advanced greatly but is not quite what we can call a grow-to-specification process.

The specialization quest we are advocating requires careful crop-choices on the part of producers, based on an understanding of their own soil, weather and growth conditions, but equally important are *market-risks*. In order to avoid these risks producers have to develop a much deeper understanding of end-market conditions, not just crop prices but consumption and production trends, as well as industry and supply-chain structures that can go a long way to target reputable corporate buyers.

There are also *trade-risks* to consider. Due diligence into prospective buyers can go a long way to minimize trade-risks, but still, sales contracts have to be structured to mitigate these risks by requiring up-front commitment-fees as well as progress payments in the course of the production process, akin to interim payments in the execution of construction or contract-manufacturing projects. Most importantly, cash payments or transfers, or at least LOCs from credible sources, must be required.

There are more risks involved in direct-sales than what producers are accustomed to in bulk-trades, which we will never underestimate in our trade-facilitation efforts. But as long as these risks are recognized and mitigated, they are worth taking as the rewards of specialization far outweigh them, particularly in view of the future risks that bulk-grain prices face -- hardly talked about in grain-industry circles but are real.

Favoured channels: contract sales

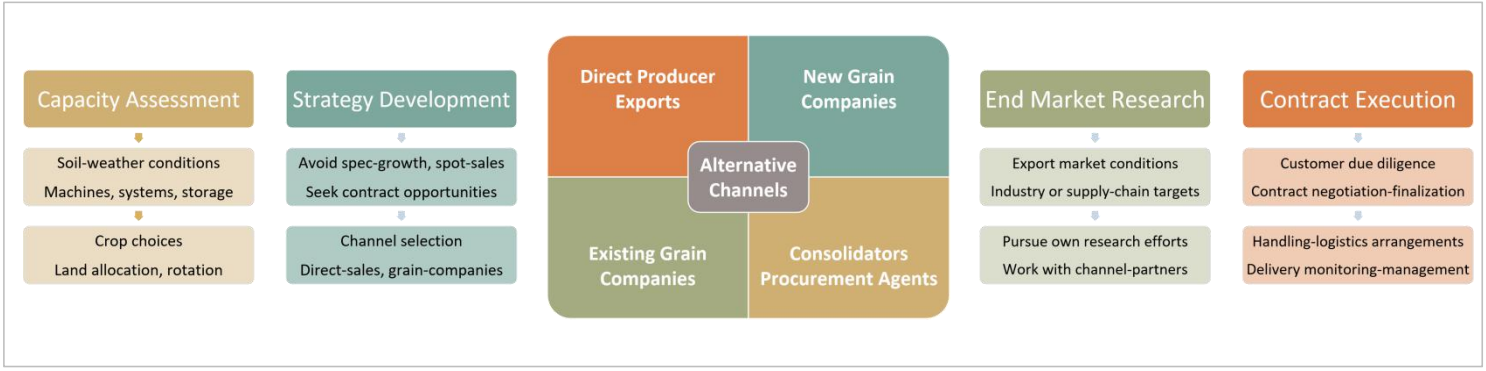
Even in today's highly bulk-oriented trade environment, producers make crop-choices based on price expectations, like how much land to allocate to wheat versus canola. However, outside the bounds of staple-crops that go into bulk-trades, or established markets like pulses, we recommend against speculative-growth. In diversifying to specialty crops, producers ought to follow a well charted course, guided by market-research, with evidence of buyer interest in direct purchases.

There is also a tendency to view direct-exports as today's *spot-sales*, keeping stock in farm-bins to sell opportunistically into domestic or US markets. This may prove profitable in small quantities for producers with an inclination to hustle-and-bustle, but cannot be the basis for a viable diversification strategy away from bulk-trades. Producers ought to be looking for reliable direct-sales channels that can sustain steady volumes to justify the effort and investment they put into specialization.

In our opinion, based on past experience in export markets, *contract-sales* constitute the most effective and safe building blocks of sustainable direct-export strategies. Thus, we intend to pursue our market research efforts to identify credible corporate buyers with specialty-crop needs (including special-grades of our export-staples) that are willing to commit to sizeable purchase-contracts. These volumes may be too large to supply from any one farm, but can still be fulfilled from multiple sources.

Naturally we will not have a monopoly on these kinds of export initiatives. All we hope to do is to have a demonstration-effect, attracting others to follow on our foot-steps. Like we saw in pulse-markets, new grain companies will emerge, specializing in containerized exports of specialty grains, specific grades of staples exported in bulk or new crop varieties. Also, today's grain companies, now focused on bulk-trades, are likely to turn their attention to containerized exports of specialty-crops.

Thus, our mission is aimed at transforming today's grain-economy, largely captive to bulk-trades to a much more dynamic, market-driven one, with higher-value crops in the offering, exporting through competitive channels, and leaving higher-margins from export-proceeds to producers. This transformation, however, will not happen overnight; it will take many crop-years for producers to adjust to the new order.



Managing crop-portfolio risks

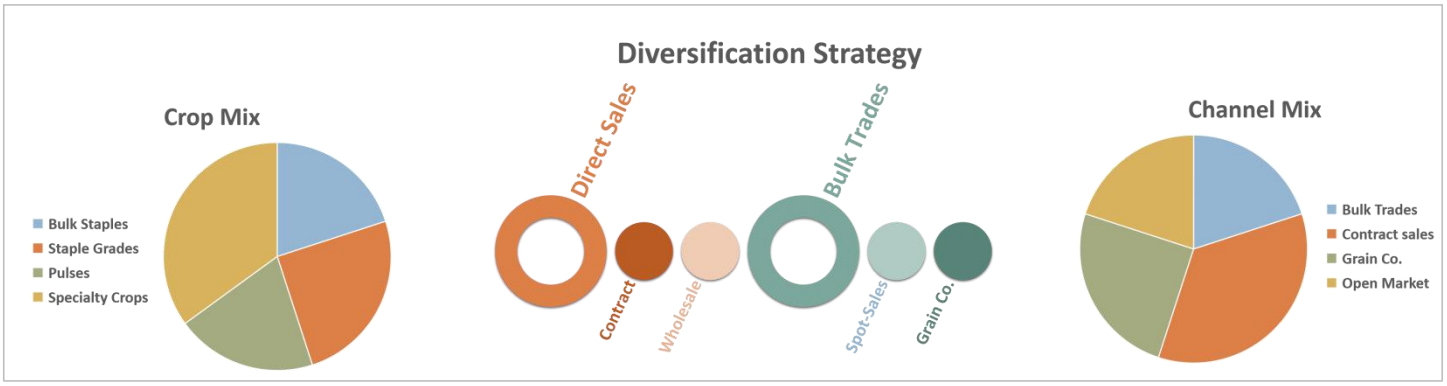
Our specialization-drive will add more value to the grain-economy, and leave higher-margins to producers, but will bring higher risks than producers face in bulk-trades. As we note repeatedly, crop-specialization and shift to direct-sales channels involve risk-reward trade-offs, compelling producers to make wise crop-choices and take trade-risks seriously. Producers should approach the process cautiously, weighing the risks as seriously as the prospects, and following a carefully charted course.

Diversification is not new to Prairie producers; they switched from board-grains to canola, but this shift was still within bulk-trades, with no added trade-risks. The shift to pulses came with a higher value proposition, but as new processing and export channels emerged, producers were shielded from trade-risks. Many producers with large enough land-holdings adopted crop-rotation patterns (typically wheat, canola and pulses in the mix) but without exposing themselves to undue market risks.

The strategy we are advocating involves a broader range of crop varieties and grades through direct-sales and containerized-shipment channels, posing higher risks -- be it production, market or trade related. To guard against these risks, we strongly recommend staying away from speculative production initiatives, reliance on spot-sales, and allocating huge chunks of one's land to any one crop-type. Also, it would be prudent to choose crops with back-up sales potential in North American markets.

The safest diversification path to specialty crops is through contract-channels -- finding reputable corporate buyers in end-markets who are prepared to pay a premium for crop quality and attributes. Contractual arrangements guard against trade-risks, with secure progress payments that not only help producers but also tie the buyers down with advance cash-outlays. Also, we would advised producers to form clubs or alliances to share contract loads, thereby spread trade-risks.

We highly recommend producers to take new initiatives, but wisely and prudently, keeping in mind that specialization involves risk-reward trade-offs. This is akin to portfolio-risk-management; as you would not bet all your wealth in any one stock or asset, don't bet your entire farm on any one export-contract, no matter how secure or rewarding it may look. Develop a strategy but take small steps along the way.



VII. Further Thoughts on Specialization: Who can Participate?

Our last article tried to tackle some of the challenges posed by the specialization imperative that we are advocating to free producers from captivity to bulk-trades. It was a general piece, focusing on the process mainly from a risk-reward perspective. It may not have answered all the questions producers have on the *paradigm-shift* we are promoting, but we have plenty more material coming on the subject that hopefully will provide a more comprehensive thesis on the challenges ahead.

In the meantime, another topic came up and we thought it would be prudent to address it before moving on with our agenda. On the surface it may sound like the whole process of diversifying to specialty crop grades or varieties may be more suitable, if not only applicable, to very large farms. There is an element of truth to this proposition, so we wanted to address it here with some ideas on how smaller farms could tackle the same challenge, incrementally without taking on undue risk.

This issue came up in some of our social-media chats, with a producer commenting that their farm was far too small to be contemplating all these diversification or specialization initiatives. In a similar vein, another producer commented that they were content with sticking to conventional crops, particularly in view of the fact that they were not carrying any debt (a factor we emphasize in our margin-squeeze argument), thus posing the question of why they should consider changing course.

Both points are valid and deserve to be debated, but neither would lead to the conclusion that our audience is limited to mega-farms, or that if you are not suffering you don't have to change. The latter is easier to address: as we discussed before, there are risks looming over our bulk-exports. You may be content with growing wheat and/or barley today, and selling into bulk-trades, but still, the future is worrisome; the world is changing, and this comfort may not last very long.

As we said before, the pressure to change comes from a pressing necessity, not simply the desire for more profit. The global market outlook already confirms our fears over bulk-export prospects, particularly with the emergence of the *New Grain Belt,* a vast territory from Caucasia to Central Asia. The same had been said about other emerging regions, but this is different for good reason: better conditions, and know-how coming from China, a country already enjoying similar crop yields to us.

We do not want to bring this debate to a closure here but we thought we would add a few more pages to our specialization-script -- we encourage more thoughts and comments from you on our portal or other social-media accounts. Here we address the issue of "scale", favouring larger farms, and but also give examples of how smaller farms can also take initiatives to diversify. We also show how sales orders can be fulfilled by the participation of multiple producers, large and small alike.

Grain-economy dilemma revisited

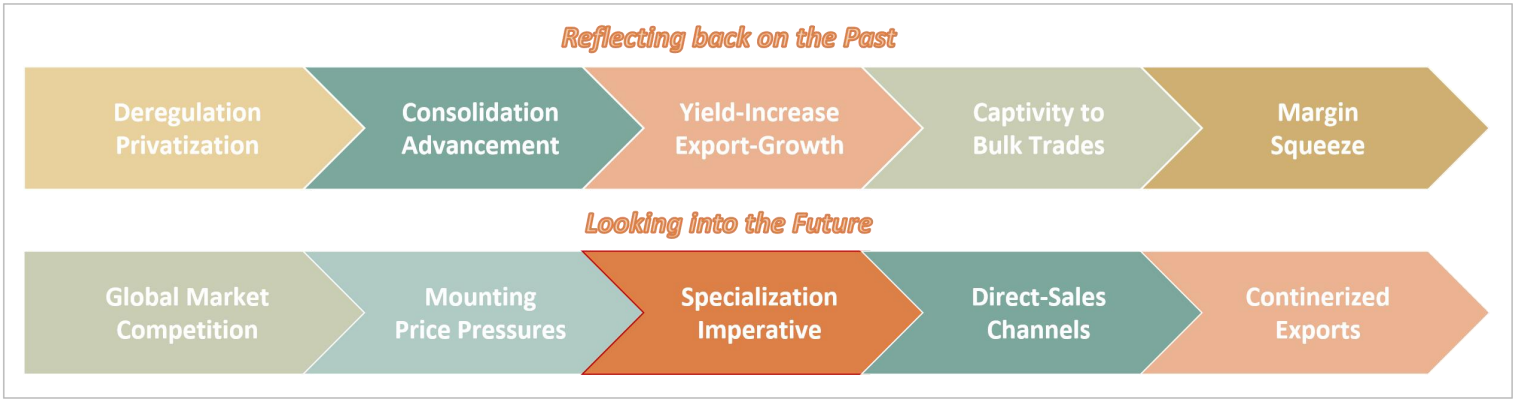
We do not want to dwell on the same issues we discussed already, but let us start with a recap, why we embarked on this initiative in the first place. Following a rapid liberalization course, the grain-economy has done quite well, at least on the surface, achieving significant yield-increases and export-growth. But we still remain highly captive to bulk-trades, as much as 85% of our exports from the West Coast. Pulse-trades added considerable value but still account for a small share of our exports.

The main force propelling the grain-economy forward came from the grass-roots, producers -- yield increases driven by consolidation and advancement. All this required considerable investment on the part of producers, be it in land, machines, systems or bins. Revenues were rising, but not commensurate with investment, increasing the debt-load on producers, still manageable for many but worrisome for others -- some were happy to retire, while others were forced out under duress.

The assets that make up the grain-economy are not limited to farms; there are the bulk-systems that handle crops to export destinations. These assets (owned by CWB and wheat-pools) were privatized, falling into the hands of a few grain companies with considerable market-power over bulk-trades, while producers were still captive to those trades. Bulk-exports fetch relatively low prices in world markets, while producers' share of export-proceeds is limited due to lack of competitive channels.

Our basic fear is that bulk-grain prices are going to come under increasing pressure due to other supply sources expanding their production, particularly low-coast ones like the *New Grain Belt* we cited. Thus, producer-margins, already narrow in today's market environment are going to be squeezed further, perhaps even jeopardizing the viability of growing staple-crops that are exported through bulk-channels. The only way for producers to increase their margins is shifting to higher-value crops.

Then, why are producers not switching to those crops? Most high-value, or loosely defined as, specialty-crops are bought directly by end-users in small quantities, and have to be shipped to final destinations in containers with their identity-preserved. But neither those direct-sales nor container-logistics channels are easily available in Western Canada, holding producers back from diversifying to higher-value crops.



The importance of scale factor

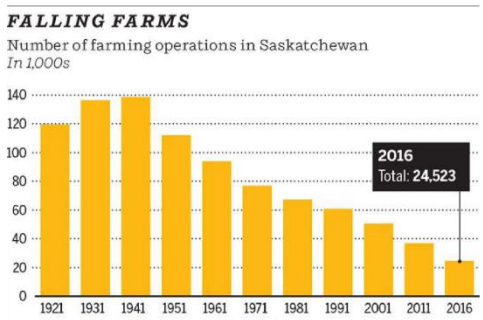
Traditionally farm sizes were quite uniform across the Prairies, and compared to today's norms, most farms were quite small, typically a couple of thousand acres. There was a strong desire to uphold family-farming traditions, and resist corporate farming taking hold. Still, with market liberalization, considerable consolidation has taken place across the region. Now it is estimated that larger than 20,000 acre farms (more than 2,500 of them) account for as much as 40% of farm-land in Saskatchewan.

Strictly speaking there are limited scale-economies in farming -- theoretically a 1000-acre plot can achieve the same yields as a 10,000-acre one. But with rapid advances in technology, larger farms started to gain considerable advantage. They could afford to buy the latest machines more easily, and benefit from all the advanced devices that came with them (sensing, spreading, etc.). Even more importantly, they could utilize equipment more effectively to justify more investment in technology.

The key factor that has propelled the farm-economy forward in recent decades was crop-yield increases, thereby achieving significant export-growth. Behind the yield increases were scientific and technological advances. The advantages larger farms had in purchasing and utilizing the latest machinery gave an impetus to consolidation. There were plenty of farmers ready to cash in on their land and retire, thus plenty of land to buy, and even rent to farm larger tracks of land, a growing trend we observe.

It could also be argued that larger farms can sectionalize more effectively, and diversify to multiple crops to increase their revenues, as many producers are already doing across crop varieties that are sold to bulk-trades (wheat, barley and canola), as well as more lucrative ones like pulses. These advantages could also extend to the new era of specialization we are trying to facilitate, to specific grades of staple-crops or new crop varieties, sold through direct-channels and shipped in containers.

There is no reliable empirical evidence to verify or refute the bounds of scale-effects in farming, other than a general belief that larger-is-better; all we can observe is that consolidation still continues. But there are plenty of sub-5000 acre farms doing just as well and diversifying as effectively as larger than 20,000-acre ones. For this, we turn to smaller farms, and what they could be considering doing to stay competitive.



Opportunities for smaller producers

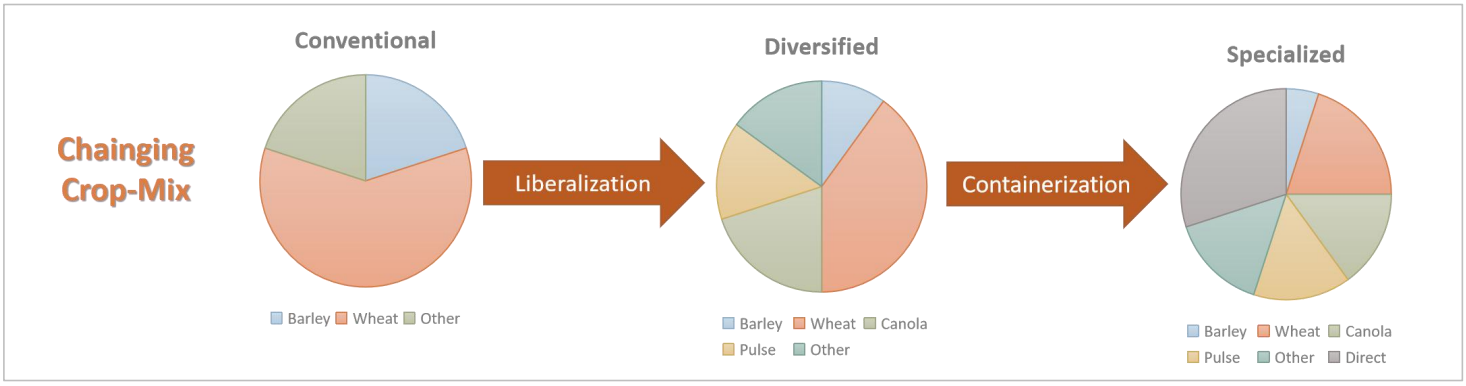
We acknowledge that size matters, particularly in making advanced technology more affordable, but there are no minimum viability thresholds for considering the type of specialization initiatives we are proposing. If you are profitable, even barely viable relying on traditional crops that you sell into bulk-channels, you should be weighing your options to shift at least part of your output to higher value crops, if for no other reason than protecting yourself against the risks bulk-exports face in global markets.

If you are farming a couple thousand acres of land that you rotate between wheat, canola and pulses, you are already doing this with the latter, higher-value crops even in the state they are in -- captive to a few grain companies with limited direct export-channels. As more attractive offers start coming from new channels that you can be confident of getting paid from, you can consider shifting more land to pulses, in view of lower margins from wheat and canola that may be squeezed even further in time.

Even if you remained more conventional by sticking to wheat and/or barley, and are selling into traditional bulk-channels, it would be worth looking into alternative channels. There are many importers around the world -- in your case flour-mills or craft-brewers -- sourcing these crops in container-lots. Even if the particular grades you grow are not in demand, you could consider shifting part of your output to types that direct buyers are looking to procure as long as they can be containerized.

Perhaps the examples we are giving here are overly simplistic or too general to guide any cropping decision, but the moral of the story is simple: there are specialization opportunities for everybody, regardless of size, as long as they have a viable starting base. Even if you are among the smallest of today's Prairie farms, there are options to consider, like organic-of-anything, to sell across North America, even overseas as grain-imports are becoming within everybody's reach around the world in containers.

Thus, it is not farm-size, but your production-capacity and the trade-risks that come with direct-sales you should consider. We acknowledge these risks and devote a lot of effort to risk management and mitigation; there are risk-reward trade-offs in all trades, including the ones you may be accustomed to. Also, we are not asking you to rush into specialization, but watch for new, more reliable export-channels to emerge.



Volume considerations in direct-sales

Let us start with "mega-farms" that industry observers (or our followers) consider to be prime candidates to participate in direct-trades. If we take a 20,000-30,000 acre farm as an example, its annual output is going to be the equivalent of 1000-1500 containers a year, or 20-30 a week. A prudent producer, in this case large farming-enterprise, is not going to tie its entire output to a single buyer, or even a group of buyers -- its volume on any one trade is not going to exceed 5-10 containers a week.

Examples we gave in our previous article, based on our own market-development efforts from a few years ago, involved three trades requiring roughly 600-750 container-shipments a week, to multiple destinations. Even if we take much smaller trades, let us say one tenth the weekly volume, we would be dealing with about 60-75 container-loads a week, requiring 10 or more of our largest farming-enterprises to fulfil. Thus, direct-sales are going to involve consolidation from multiple sources.

Our trade-facilitation aim is to identify credible buyers and ensure that what they need can be sourced from our region, to the specifications they stipulate. After we carry out the necessary due diligence on the buyer, we would ask them to issue a standing-order. Then a consolidation-agent will get involved -- buyer-representative, local export-agent, or an established grain-company -- to initiate the sourcing efforts from Prairie producers. Then, negotiations will get underway to finalize the contract.

Let us say a 50,000 T per year contract materialized and half of it is taken up by 5 very large producers committing about a fifth of their output for the coming crop-year. The other half, still 25,000 T, can be shared by 50 smaller producers, each taking up 1% of the contract-volume but still committing a fifth of their output, 500 T/year -- 25 containers/year. This is what we would regard a steady export-flow, involving crops as ordinary as grades of wheat/durum sold to a major flour-miller.

There could be plenty of such contracts for grades of wheat or barley for milling or malting, as well as a much broader range of coarse-grains or oilseeds for custom cereal or feed mixes we cited earlier, not to mention pulses or other crop varieties. Hundred such contracts would increase our containerized grain exports from the West Coast by 150%, for a multitude of producers of all sizes to participate in.

A smaple export-contract
50,000 Ton/year - 50 containers/week

5 Large Producers	50 Small Producers
5 @ 5,000 T/year	50 @ 500 T/year
20% of their output	20% of their output
10% of the contract volume each	1% of the contract volume each

VIII. Future of Grain Industry Structure: Our Brief Outlook

In our last article we addressed the question of "who" would be best positioned to take advantage of contract-sales opportunities from direct-channels -- large, small, or all producers. And before getting into this topic, we had also noted the persistent consolidation trend since the 1940s, with the number of farms shrinking by half in the last 30 years alone. Looking into the future, we expect this consolidation trend to slowdown, but coupled with a movement from small to middle sized farms.

"Scale" brings specific advantages in agricultural production: large farms are able to afford the latest technologies more easily (lease or purchase) and utilize their equipment, devices, and systems more effectively. They also have an advantage in sectionalizing their farms to diversify and shift to higher-value crops. However, at some point scale-economies are exhausted; in fact, there is scope for mid-size farms (sub 10,000 acres, even smaller) to realize the same advantages much larger ones do.

On a related matter, there is a tendency to view direct-contracts as the exclusive domain of mega-farms, but this is a false-perception. Most contracts will be too large for any one producer to fulfill, as was the case with opportunities we pursued in the past, and such contracts will have to be procured from multiple sources. The hypothetical example we gave in our last article involved 5 very large and 50 smaller producers fulfilling a contract by committing a reasonable portion of their output.

As trade-facilitation efforts start bearing fruit, we can expect many more contracts like this to emerge, contracts of various sizes with most if not all requiring purchases from various sources, in turn giving rise to a new breed of "consolidators". They may be buyers setting up procurement companies, or producer-collectives forming to perform the same contract fulfillment functions (sourcing, handling, shipping, etc.) thereby capturing a larger share of supply-chain margins on producers' behalf.

We saw this happen in the early stages of pulse export-trades, initiatives from both importer and producer ends, which we will get into below, but similar trends will take hold as other containerized specialty-crop trades develop. We will see the emergence of a multitude of entities engaged in procurement, consolidation and contract-fulfillment, on behalf of buyers or producers, or grain-companies to their own right – serving specific or multiple trades, including grades of staple-crops.

As these new trades develop and grain exports diversify through direct-sales and containerized-shipments, not only will new companies get into the act, but also existing grain companies, currently focused on bulk-trades, will turn more of their attention to these new channels. In whatever manner the grain-industry structure evolves, we can be certain of one thing: a market-driven industry will form, more diverse and competitive, serving the best interests of producers with higher margins.

Future of farm consolidation

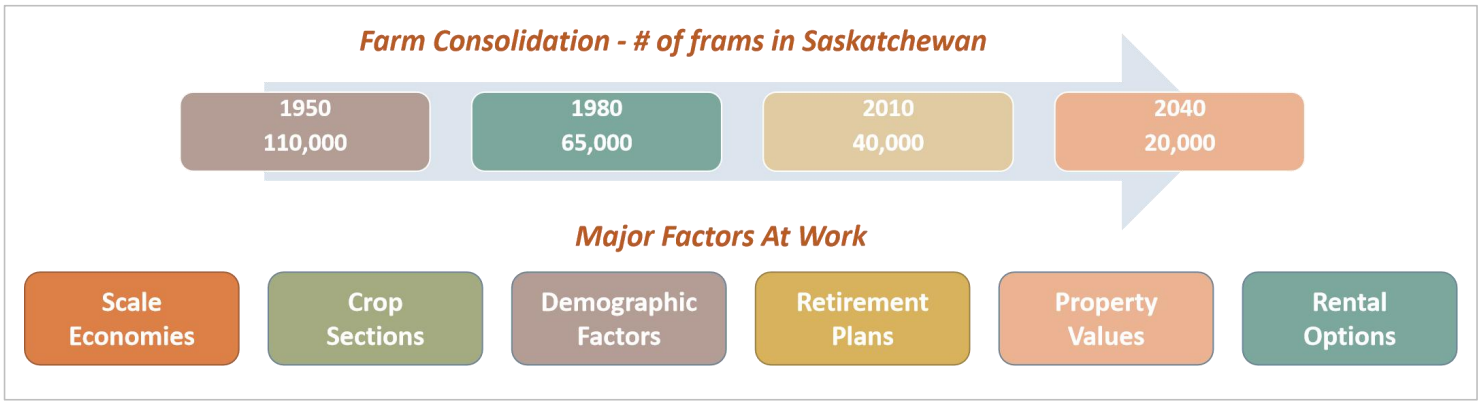
The evidence from Saskatchewan clearly shows the consolidation pattern over time: 140,000 farms in the early 1940s down to less than 25,000 by mid-2010s, down more than 60% in the last 25 years alone. Despite any statistical evidence of this trend abating, we sense that the pace of consolidation will slow down, at least by half, leaving about 20,000 farms by 2040 -- a rough estimate, not an exact prediction. We must understand the causes of this trend before passing judgment on the future.

This persistent consolidation is not merely driven by scale-economies, as economists would define. There are other factors at play, demographic trends and retirement considerations among them. The rural population is aging and younger generations are moving on to other professions, while retirees are looking at their properties as investments rising in value, hanging on to ownership even after they stop farming. This gives rise to rental-practices with more farmland worked under management.

With all these factors in play, predictions are difficult, and even if available from informed sources, precise forecasts are not very useful for our purposes, as long as we get the gist of where trends are headed. We do not see consolidation coming to a halt, let alone reversing itself, but a slowdown seems on the horizon. We will see fewer farms at the small-end (sub-5000 acres) and more in the mid-range, large enough to realize similar productivity levels (crop-yields) as today's mega-farms.

From our perspective, more important than farm-size is "yields", which will rise across the board as a result of advances in agronomy and technology. This will allow about 25% increase in export volumes in the next 20 years. Even if bulk-export volumes hold their own, there will be room for containerized grain exports to more than triple to 15-20 MT range -- requiring more container capacity than is currently returning empty across the Pacific but still feasible within prevailing trading patterns.

From our perspective, however, bulk-trade volumes holding their own is a big *if*. Accommodating growth coming from yield-increases may be the easy part of the challenge; coping with the decline in bulk-trades would be much more difficult, requiring more fundamental changes in our transport-systems. The silver-lining is that new exports will be much higher in value, justifying more logistics investment.



New breed of consolidators

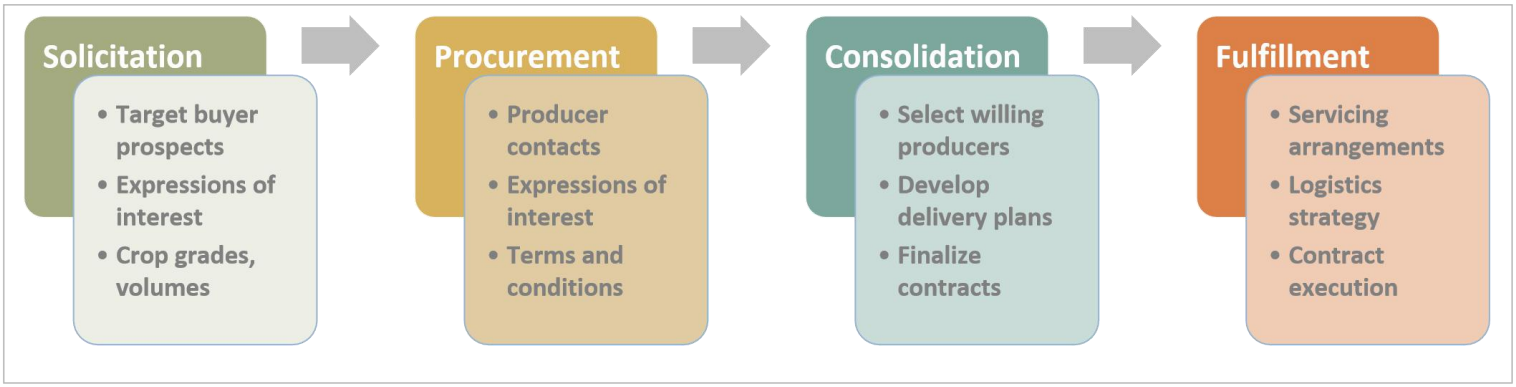
Unlike the current industry structure where producers' output is consolidated and traded in bulk, the vision we have is a grain-economy where producers grow more specific grades or varieties of crops that end-users need and purchase through direct-channels. This, however, does not imply that all transactions take place between individual producers and buyers. There will be intermediary-channels facilitating these trades, acting independently, or on behalf of buyers or sellers.

The healthiest way our producers can shift to more specialty, high-value crops is through contract-sales involving large and steady volumes, not small or spot sales that pose more risk and uncertainty. Accordingly, we will aim our trade facilitation efforts at steady contracts, too large for any one producer to fulfill, thus requiring intermediaries, what we refer to as "consolidators" looking after procurement, handling, and shipping functions that come with fulfillment of large export-contracts.

We saw the development of these types of channels as pulse-trades got underway, offering much higher value opportunities to producers than staple-crops exported through bulk systems. The most successful initiative in these trades was a local company, AGT, in partnership with a major overseas buyer. Riding on the success of exports to the Middle East, AGT expanded its scope, went through a corporate restructuring, and is now pursuing other global markets to expand pulse-exports.

At the early stages there were also a number of producer-initiatives, setting up facilities to clean, grade, and ship pulses to end-markets. After successive mergers, a sizeable entity emerged but ran into financial trouble (ironically canola related), and its assets were bought by Scoular, a very old US grain-company with considerable global reach and transport capacity. Thus, in pulse-trades we saw the emergence of export-consolidators from both ends, importer and producer, with many yet to come.

As in pulses, high-value and containerized trades, we expect to see the emergence of a new breed of company to perform the consolidation, processing and shipping functions to fulfill export-contracts. They can emerge from producer-ranks, buyer initiatives, or local entrepreneurial start-ups to serve the new trades we envisage -- specific grades of wheat, durum, barley, or other crop varieties that are in demand.



Existing grain companies' response

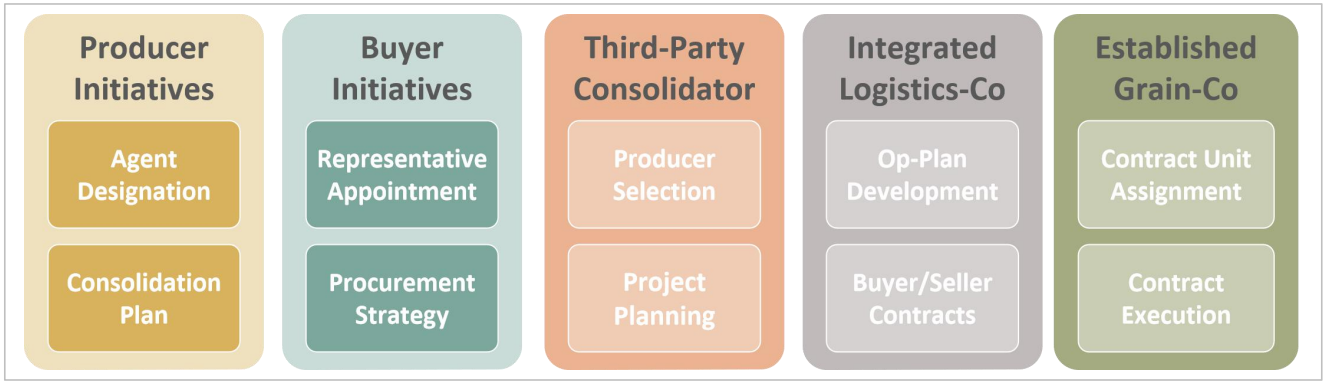
The new breed of companies will not have emerging trades all to themselves; the new opportunities will not go unnoticed to already established grain companies now engaged in bulk-trades. Many of them have vested interests in bulk-systems, huge capital investments in terminals, which they cannot easily walk away from. But if bulk trade volumes start to decline, as we anticipate they will under global pressures, all these companies will be looking for other opportunities in more specialized trades.

Largest among them is Viterra, which came into being through the consolidation and privatization of wheat-pools, creatures of CWB-era. Glencore, a global commodity-giant, took Viterra over with some of the assets shed to Richardson. The latter, a very old Canadian company founded in the mid-19th century, became much more formidable in grain trades in the post-CWB era. There are many others, Paterson and P&H among the most prominent and oldest, both dating back to early-1900s.

There are numerous other global giants with a presence in Canadian agriculture -- Cargill, ADM, Louis Dreyfus among the best known names. Not all these giants may have significant stakes in bulk-export trades, but G3 does -- joint-venture between Bunge (major US grain company founded in early 19th century) and Saudi investors that bought CWB assets. All these companies have the financial resources, industry knowledge, and global connections to step into specialized crop trades in the Prairies.

Two examples we had cited in a previous article, custom-mixes for breakfast-cereals and animal-feed, were open to major grain companies stepping in as consolidation-agents. Cargill, a global giant, was a shareholder in one of the targeted buyers, China's largest cereal company, thus was likely to get involved in its procurement efforts. Also, the feed-company we were targeting (largest in the world) had an equity stake in a US grain-company, Lansing (since taken over by Andersons).

What we are trying to convey here is that there is no shortage of grain-companies that could step into newly emerging export trades. But unlike the bulk-trades that incumbents control, and producers are captive to, emerging containerized trades will be contestable by a multitude players, including producer or buyer initiatives, or entrepreneurial start-ups, making grain-export trades so much more competitive.



Impacts on competitive landscape

If the new trades we are talking about, and trying to facilitate, are open to all the world's agricultural-giants, as well as the principal custodians of our bulk-systems, then what is going to change for the producers? The short answer is a great deal. As export trades shift from bulk to direct channels, the overall industry structure will be fundamentally transformed, to give producers more choice in what they grow and how they sell their crops, thereby put them in a position to realize higher margins.

Let us first look into the nature of bulk-trades. First, the very act of consolidation in bulk is a value-losing proposition, as there is less scope for crop-differentiation by specific attributes, the main source of value in grains. Thereby, we lose out on the prime advantage we have in differentiating ourselves in world markets, our ability to grow higher value crops with specific attributes. We stick to staple-crops while we could be leveraging our know-how, science and technology to grow other varieties.

Second, bulk-systems with terminals (inland and coastal) are very capital intensive, and the way the system was privatized left it in the hands of a few companies with an interest in large trades. They are motivated to generate large volumes of a few staples that can be traded in bulk; they incentivize producers to grow these staples. This is the low-value, low-margin trap that producers are now captive to; they have the freedom to grow what they wish but not the channels to export through.

Our producers have the capacity to grow highly differentiated crops, even to buyer specifications, which can be sold directly to end-users and shipped to their door-steps with crop-integrity intact (identity-preserved). Our mission is to facilitate these types of sales and logistics channels for producers to reach out to end-markets to sell much higher-value, differentiated grades or types of crops, instead of the low-value export-staples that go into bulk-trades, with more security but squeezed margins.

If producers can be connected with end buyers, why are we then talking about the need for intermediaries or consolidators to get involved in what we call direct-sales? There are risks associated with direct-sales; producers cannot afford to fall captive to any single buyer by committing all or large portions of their output, while they need steady orders to rely on. The latter come with large-contracts, which in turn require sourcing from multiple producers, thus requiring consolidation by intermediaries.

If global agricultural-giants, including the custodians of our bulk-trades, can step in to perform these functions, how will the new system be different than what we have now? The answer is simple, unlike capital-intensive bulk-systems, consolidation or contract-fulfillment functions can also be done by producer-coops, buyer-agents, or other start-ups that can step into the act to contest any undue market power held by corporate-giants. Export markets will be more accessible and competitive, with a multitude of intermediaries or consolidation-agents for producers to choose from.

IX. Market Research Agenda: What to expect from us

Market research efforts in the grain-industry tend to focus on price-volume trends in global markets, which is understandable as they are crucial reference points in guiding crop-choices of producers as well as trading-activities of grain companies. In facilitating direct-sales market research efforts must go much further. Accordingly, our research agenda focuses on changing supply patterns in order to understand market dynamics, consumption-processing trends to target new opportunities.

On the supply-side we are embarking on a study into a vast emerging region we call the *New Grain Belt*, stretching from Caucasia to Central Asia, which will pose the greatest competitive threat to our bulk-exports. We are also compiling our past work under the title of *China Factor*, the largest grain-importer. It is often taken for granted that China will continue to import more of the same, but as its yields increase and supply-chains are restructured, its trading patterns will also change.

We have two more initiatives underway. The first is on the US, the world's largest producer and exporter but still a major export destination for Canada. US producers may follow on our foot-steps in shifting to direct exports, with obvious competitive implications. The second is on EU, another huge grain-block and a major importer as well as exporter. Our primary interest is to understand the recent dynamics of this market, which offers lessons in both containerization and supply-chain integration.

In the months to come we will be sharpening our market-targeting efforts, focusing on Asia Pacific, the fastest growing region and the one we are most familiar with. We will not take our eye off China, still our largest export destination, even with our trading-relations in great jeopardy. While we look into re-export prospects to China, we will focus on the advanced economies in the region, Japan and Korea, and also pay more attention to Indonesia, Philippines, Malaysia, Thailand and Vietnam.

As part of our targeting efforts we will compile reports on grain trades of all markets we will be focusing on, but also crop needs (by grade and type) in specific industries and supply-chains. At the outset our focus will be on flour-milling with specific grades of wheat and durum, craft-breweries with barley varieties, cereals with coarse-grain mixes, and animal-feed with custom-mixes targeted at major feed-companies. We will extend the work we cited earlier on China to other countries.

As we had mentioned before, our research-agenda is ambitious, as this is the only way to facilitate direct export-sales -- identifying market opportunities and more importantly targeting credible importers. But our resources are not unlimited, thus we are on the look out for as much external funding as we can mobilize. Accordingly our priorities may be influenced by our sponsors, but we are still determined to respond to producer wishes -- so, we look forward to your requests and suggestions.

Global trends:emerging regions

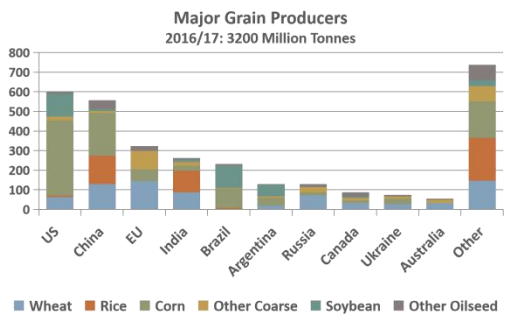
As part of its ambitious globalization strategy, China embarked on a major project, *Road and Belt Initiative (BRI)*, with a vast geographical reach -- from its borders to the north (Mongolia, Kazakhstan and Russia), west across Central Asia to Caucasia and beyond to Europe, also along a southern axis from Southeast Asia to Middle East and Africa. The original focus was infrastructure (ports, roads and railways), basically extending what it had done domestically to other regions it could trade with.

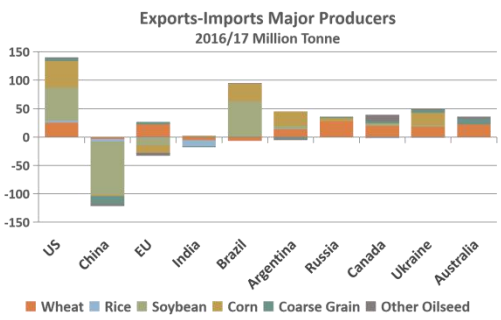
Part of China's agenda was to open up export markets, but even more importantly to satisfy its appetite for natural resources -- natural gas, oil, metals and minerals. Also, of crucial importance was agriculture, particularly in the region stretching from Central Asia to Caucasia. Once largely self-sufficient, China had become the world's largest grain-importer, having to reach out to Americas, North and South, to meet its food and feed needs, but the region across its border looked even more promising.

There was not much to import yet, other than the Black Sea region that China was relying on, but a great deal of potential to develop from its own border all the way to Ukraine (already a major producer and exporter). As in everything else, rather than half-way measures, China went all-out, investing in not only transport infrastructure but also irrigation projects. The region already had a base in agronomy, but China descended with all the machinery and expertise to kick-start an agricultural revival.

All BRI projects relied on containerized intermodal systems; China drew on its domestic experience in order to replicate the same pattern across Asia to Europe. The potential benefits, and logistics cost-savings from door-to-door shipments, were evident as in its domestic systems. Now most, if not all, of China's grain-imports from its west are containerized; there also is desire to do the same across the Pacific, with emphasis on high-grade crops, while procuring ordinary ones from its west.

In tandem with the *New Grain Belt* project, we will publish a report, *China Factor*, reflecting on the country's remarkable achievements in domestic agriculture -- yield-increases and crop-diversification driven by advances in agronomy and technology. Old images you may remember, of poor peasants working the fields with primitive hand-tools, have been replaced by modern-farms, as large and advanced as ours.





Global trends: advanced competitors

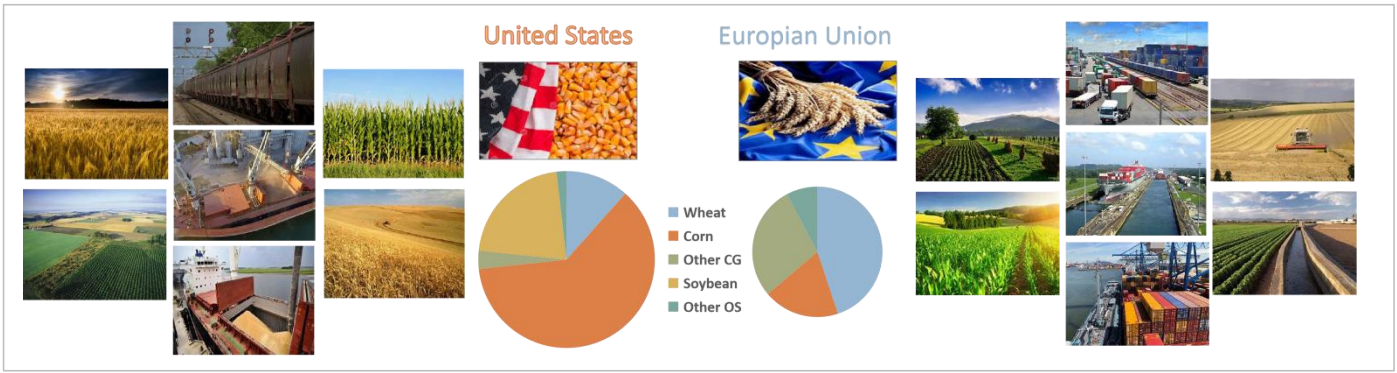
After these China-related reports, we will turn our attention to advanced regions, US and EU. The US is the world's largest grain producer, 600 MT (65% corn, 20% soybean, 10% wheat) -- about 20% of global production. It is also the largest grain-exporter, about 25% of what it produces -- three staples (soybean, corn, wheat) account for 90% of its exports. We produce about 90 MT (30% wheat, 15% canola, 45% other) but export 45% of what we produce, much higher share than the US.

Despite our dependence on staple-crops and bulk-trades, our crop-base as well as export-portfolio are more diverse, especially with pulses in the mix (10% of export volume but much higher share in value). The US is less export-dependent, but its export volume is much larger and even more bulk-oriented than ours. If the US also follows a value-driven specialization-path, we will face formidable competition. Thus, we must pay close attention to how they are positioning themselves in end-markets.

Behind US and China, EU is the third largest grain producer -- 320 MT, close to half wheat and the rest in other coarse-grains and oil-seeds. Its trading volume (80 MT, 4th largest behind Brazil) is 25% of its production but fairly balanced (only 5 MT more imports) -- net-exports of wheat and other coarse-grains but imports of soybean and corn. Though EU is the largest wheat-grower in the world, it has been a wheat export-destination for us (particularly durum) but with no growth in recent years.

Farms across the EU are much smaller than in North America but equally advanced in agronomy and technology. Also, agriculture is more diversified in both crop varieties and grades, and trades are mostly through direct-channels (producer-to-processor) and containerized -- a model we are aspiring to replicate. More importantly, driven by market forces (albeit with some trade protectionism) grain-food supply chains have reached a very high-level of integration -- offering important lessons for us.

This integrated and advanced agricultural economy is now extending its borders east to Ukraine, Georgia and Turkey -- combined production capacity reaching China's. In time we may even see a highly integrated market with a huge continental footprint including China. On the surface this may be threatening our position but luckily we are only a short-hop across north-Pacific to become an integrated part of this block.



Target geographical markets

As must be evident from our portal and the articles we publish, we have a great deal already invested in market research into China's grain-trades and supply-chains. In addition to our *China Factor* report, we will publish more in the coming months. Though the future of our direct trade relations with China are in peril, at least in serious doubt, we will be on standby and continue to pursue re-export prospects through other channels; we already have initiatives underway through Singapore.

Japan is our largest overseas export destination behind China, but still stuck at just below 4 MT/yr with hardly any growth over the last 2-3 decades. Japan is a major grain-importer, 23-25 MT/yr -- 15-16 MT of corn, outside our scope, but 4-5 MT of wheat, 1-2 MT of barley, and 2-3 MT of oilseeds (mostly soybean) within our reach. We have excellent trade-relations with Japan; as direct-sales and containerized channels develop, we should be able to greatly increase our grain-export volumes.

We entered a free-trade agreement with Korea in 2014, boosting both import and export prospects. Korea imports 15-16 MT of grains annually; again more than half of this is corn, but there is potential to grab a larger share of other imports -- 4-5 MT of wheat, 1.5 MT of soybean and about the same in coarse grains, including barley. Korea's highly advanced supply-chains in all these areas present export opportunities, particularly as we develop our containerized channels to ship specialty grades.

We also see very promising grain-export prospects in Southeast Asia, including the five largest and most dynamic economies, which we will refer to as *Five Asian Tigers* -- Indonesia, Philippines, Malaysia, Thailand and Vietnam -- with combined grain-imports of 35-40 MT /yr. Leaving aside rice (grown in the region) and corn (imports from other parts of Americas) there is 15 MT of wheat and 10 MT of other coarse-grain and oil-seed imports that we could target, many times what we export now.

Leaving aside India -- the largest grain market outside China but fairly self-sufficient and difficult to export to -- these seven countries we cite import more than our total grain exports. Much of what they import may be outside our scope and a large share in the bulk-domain that we have little interest in, but there is at least 10 MT of high-value containerized exports that we could be targeting throughout this region.

	Japan	Korea	Indonesia	Philippines	Malaysia	Thailand	Vietnam
Wheat	4-5 MT	4-5 MT	10-11 MT	6-7 MT	1-2 MT	3-4 MT	4-5 MT
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
Total Imports	23-25 MT	15-17 MT	13-15 MT	9-12 MT	7-9 MT	5-7 MT	15-20 MT

Target crop market segments

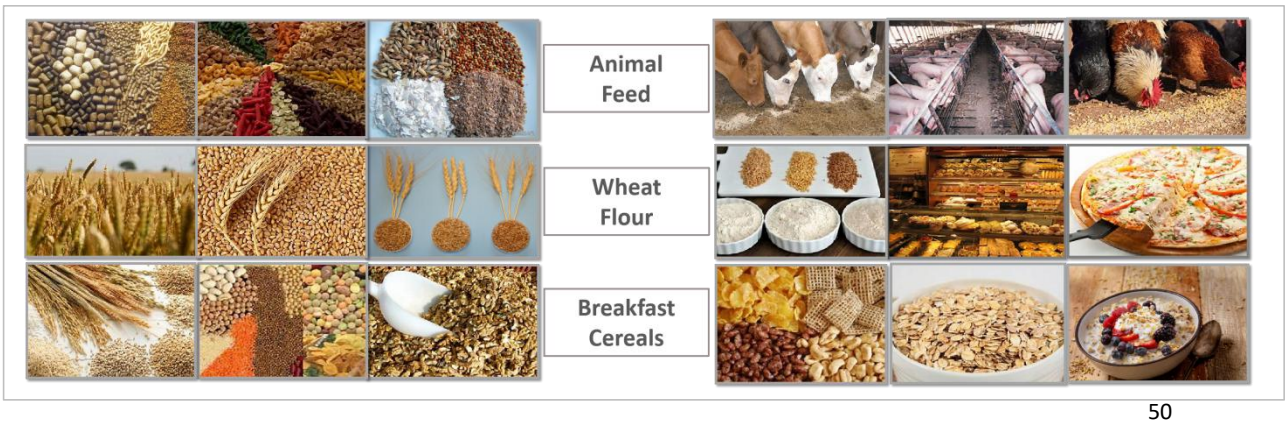
As we keep emphasizing, targeting geographical markets based on import volumes is just the first step. In order to get at the direct-sales potential, we have to focus on specific industry segments and supply chains to identify potential buyers. We will continue to focus on the same prime target-markets we had pursued in China but now we intend to extend these efforts geographically to other Asia Pacific countries.

Given that wheat (including durum) is the largest volume crop we produce, and our largest export item, it will remain a priority in our market research agenda, focusing on flour-milling industries in all the geographical markets we target. We do not expect the industry structures in all these markets to be as conducive to distributed mill deliveries as in China, nor do we expect the industry consolidation trends to be as massive, but we see huge potential for specialty wheat-grades across the region.

Our barley export volumes have never been at the same level as wheat, but they are a fifth of what they were 20-30 years ago. There is no future in this crop as long as we continue to view it as another cheap input into feed-streams, at home or export markets. As direct-sales and containerization channels develop, export prospects will open up (albeit in much smaller quantities than wheat) for suitable grades of barley for malting and distilling, the focus of our efforts in all the markets we target.

As we noted in reference to China, animal feed is becoming a major driver of grain-imports for most countries, but feed-industries are not as developed throughout Southeast Asia as in China, Japan and Korea. There is a huge potential for the type of feed-mixes we had mentioned earlier, not just in advanced but also emerging economies. An often overlooked advantage is containerization of prescribed mixes at production-sources, rather than scrapping together residual grains at feed-lots.

The same advantages apply to many other custom mixes (coarse-grains and/or oil-seeds) in food-chains. We noted this earlier in reference to breakfast-cereals, which we will pursue throughout the region we are focusing on, but there are many other food-processing chains to consider, including bakeries and other prepared foods. As in most other things, China, Japan and Korea are the markets to start with, but the others not to be ignored, as food-chains are restructuring, advancing everywhere.



X. Recasting our Global Image: Extolling Prairie Virtues

We are among the largest grain producers in the world (8th) and rank even higher in grain-exports (5th). We export close to half of what we produce; in this respect we rank 3rd among major producers, only behind Ukraine and Australia, both exporting two-thirds of what they produce. While it is a blessing that we have this resource that feeds us and generates export earnings, our grain-economy remains highly dependent on bulk-exports, with not enough high-value crops in our export-mix.

We have been taking comfort in the quality of what we produce and the yields we realize. Crop-yields have been rising steadily in recent years as a result of advances in agronomy and technology, allowing us to increase our export volumes. But we are not alone in this regard; others have been achieving the same, especially emerging economies with much lower cost-bases. This puts pressure on our bulk-exports that is likely to get worse in the coming years, yet we seem to be in denial of this threat.

To our credit, we have not been as complacent as our neighbour to the south, the US, world's largest producer and exporter. Although it is less dependent on exports, only quarter of what it produces (less than half our ratio), it is in a much worse spot – with 3 crops (corn, soybean and wheat) making up 90% of its exports, and having to compete with Brazil, Argentina and other low-cost producers. Though far more export-dependent, we at least have managed to diversify our exports much further.

Following a persistent market-liberalization strategy, we deregulated and privatized our grain-export channels, and in the process added canola to our exports, now half our wheat-exports. Also, we added soybean to the mix with higher-value grades than the US and Brazil that are tied to China with two-thirds of their combined soybean-exports -- more than our total grain output. We also discovered our potential in growing pulses, still small in export-volume but much higher in value.

However, we are still stuck with two major problems. First, far too large a share of our exports are in bulk, as much as 85% from the West Coast, and we struggle to diversify to higher-value crops, as they need to be shipped to final destinations in containers with crop-integrity intact. Second, the way we privatized our grain-industry assets left them in the hands of a few companies, now controlling the bulk-systems that producers are highly captive to, leaving them with narrow margins.

There is a way out of this low-value bulk-trap but it is going to take more than just relying on market-forces to guide us down that path. There is no need for direct government action in this regard, as producer can drive the process by shifting to higher-value crops, specific grades or new varieties. But while portals like ours can facilitate the formation of direct-sales and container-logistics channels, there is still need for support from public agencies to recast our grain-image on the world-stage.

Our mandate revisited

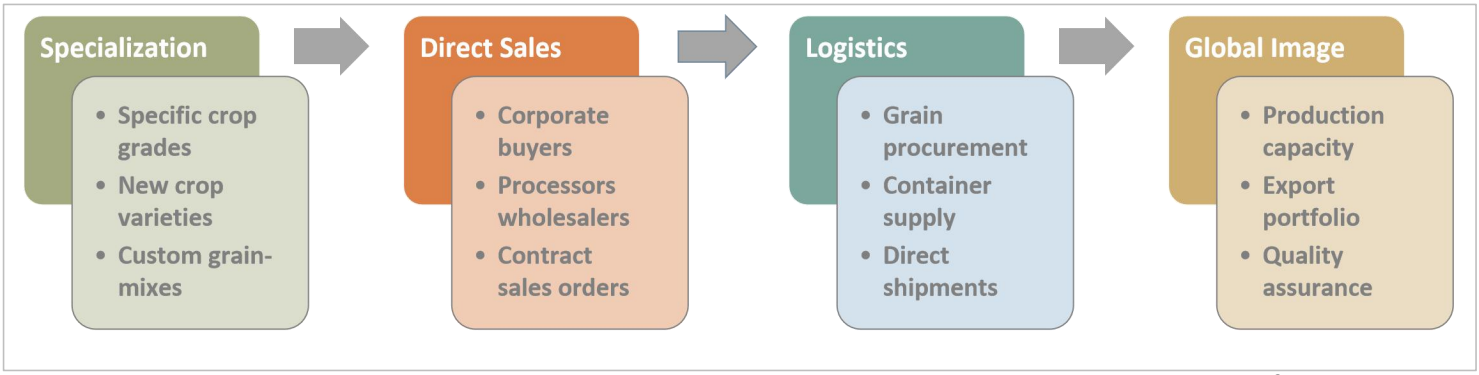
Our mandate is to facilitate diversification to specialty crop varieties or grades that fetch higher-value in global markets and leave behind higher-margins to producers. We see this as a means of survival for our grain-economy; bulk-exports are under pressure from emerging regions that are improving yields from a lower cost-base. Whether producers feel these pressures or not, we believe they would be motivated to make the shift to increase their margins, what we coin as their *path-to-prosperity*.

The type of high-value specialty crops we are encouraging producers to shift to are generally sold in smaller quantities to direct-buyers with specific needs (mainly processors) that are willing to pay a premium for crops with special attributes. This is common practice across North America, but not in overseas export-trades, mainly because supply-lines are mostly geared to bulk-trades. The first prong of our mission is to facilitate the development of these *direct-sales channels* to export markets.

The type of crops sold through direct channels are not only traded in small quantities but must also retain their attributes (like IP-grains). They must be containerized and delivered to final destinations without having to be re-handled, but containers are in short-supply. Huge volumes of containers return empty from the West Coast, but little effort is made to pull them further inland. The second prong of our mission is to develop the *container-logistics capacity* to fulfill point-to-point grain deliveries.

Our mission is often misconstrued as an effort to eradicate bulk-exports, thus a ploy to undermine the interests of existing grain-companies. We have no such agenda; if we could containerize just the growth increment from yield-increases, in time reaching 15-20 MT/yr, producers will be much better off. As a result, the industry will become much more competitive with a multitude of players (including existing ones) serving specialty crop trades, leaving behind higher-margins for producers.

We are confident in our ability to achieve the *paradigm-shift* we are contemplating, shifting our export-base to higher-value crops, but there is a remaining obstacle that we need collective action to overcome. Prairies are known for bulk-exports, not the specialty-trades we are trying to facilitate. We must recast our global image as the premier source of all types of crops that can be delivered to importers' doorsteps.



Advanced agronomy and technology

We tend to take it for granted but after decades of consolidation and modernization Prairie farm-landscapes have been completely transformed. The impressive display of technological capacity is for the whole world to see: latest farm-equipment with guidance, monitoring and spreading devices that make precision-farming a reality. We also see drones monitoring crop conditions, as well as management-systems and big-data for activity-planning purposes, from seeding to growth to harvesting.

The farm-economy has gone through massive deregulation and privatization, but generations-old traditions have not only survived but strengthened with a renewed sense of entrepreneurship. By keeping corporate-farming at bay, the best of family-farming traditions were upheld in adapting to a market-driven environment. We saw this at play in the shift to canola, and later pulses; we now expect our farmers to enthusiastically embrace the next wave of specialization driven by direct-sales.

There is also another factor to bear in mind, the region's scientific capacity that has been highly instrumental in driving this advancement in agriculture. Our universities and research-institutions are at the frontiers of agronomy, especially crop-genomics, with a keen interest in field-applications. Our producers have greatly benefited from this scientific knowledge, be it on seed varieties, soil conditions, fertilizer usage, or farming methods -- critical elements in propelling value-driven specialization forward.

Quite content with the outcome, yield-increases, we take all these advancements for granted. When prospective importers look into the profile of the Prairie region, all they see are export-volume and value-add charts, as evidence of how well we are doing. There is little that importers can take away from the advanced state of our farms or the scientific capacity behind our grain-economy, let alone our ability to grow all the specific crop-varieties they need and are prepared to pay a premium for.

To promote our grain-exports, particularly the high-value specialty crops that we need to turn to for the sake of our producers, we have to re-brand our global image, emphasizing our advanced production-capacity and diverse crop-base. Importers have little interest in seeing grain-terminals or bulk-ships; they need to see images of advanced-farms, science-and-technology in action growing highly specialized crops.

Crop variety and export capacity

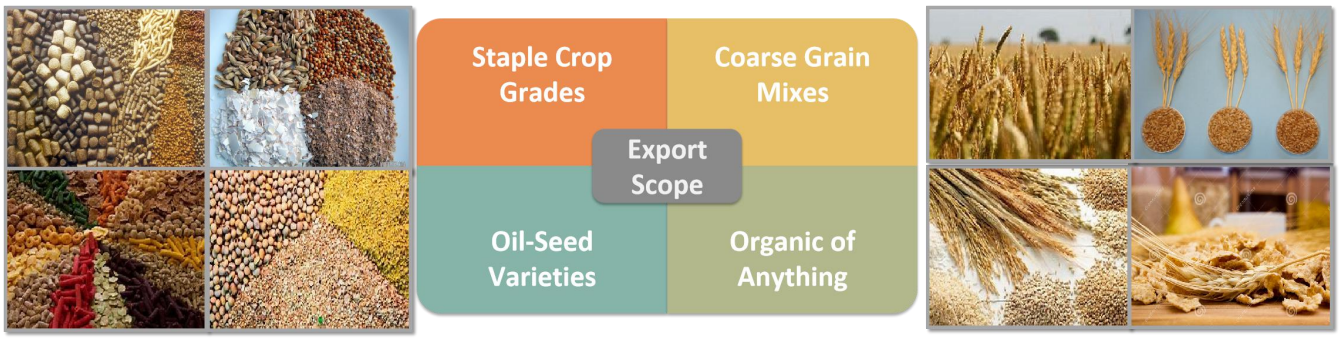
As we noted, for a highly bulk-oriented grain exporter, we have achieved a certain degree of crop diversification, at least more than the US. Our earlier shift to canola is evidence of this, but by becoming its largest producer and exporter, our leading traders must fear that they are too exposed, thus contemplating huge increases in crushing capacity, targeting bio-fuels as an alternate use. It is puzzling that we are looking for alternative uses instead of alternative crops (even grades of the same).

Growth in canola did not come at the expense of but in addition to wheat; while our wheat exports remained stagnant, the world was still hungry for more. We missed out on durum prospects in Europe, while failing to sell any durum to China, an even larger market than Italy. Flour-millers all around the world are looking for wheat-grades to mix with standard-stocks to produce flours with specific attributes, but we do not seem to have any interest in turning our attention to new wheat varieties.

At the root of these and many more missed opportunities is the bulk-trap we have been in, with the vested interest of our grain-companies tied to bulk-systems that they are so heavily invested in. Our mission is to break open this bulk-cage through direct-sales channels to export grains in containers. However, there are challenges ahead, to recast our global image from a bulk-exporter to a source of specialized crops with the capacity to fulfill custom orders to be delivered in container-lots.

Together with grain handling and containerization capacities, we must demonstrate our capacity to grow almost any type of grain that importers wish to buy directly through producer-channels. We already noted the burden that befalls government agencies in recasting our global image by displaying our scientific and technology capacities, already in action in our highly advanced farms. We must append to this new image our capacity to grow-to-order a vast array of crop grades or varieties.

We are known for the quality of our two staples, wheat and barley, but not for all the grades we can produce of both to meet the specific requirements of flour-mills, brewers or distillers. We also have the capacity to grow and prepare custom-mixes of most coarse-grains and/or oil-seeds needed along feed or food chains, and ship in scheduled container-lots to specific processing plants in quantities buyers need.



Institutional and regulatory framework

In recasting our image on the world stage, we have to extol our *production-capacity* and *crop-diversity*, but there is one other crucial element, *quality-assurance*. The quality of our bulk-exports, sold through credible channels, is already established. Now that we are trying to shift the emphasis to highly specialized grades and varieties of crops through new channels, we have to convey to the world that we have the systems in place to ensure buyers that they are getting what they order.

In this regard we do not have to worry about developing or even strengthening our systems; they have long been in place and in effect with full compliance on the part of all players involved along the grain-chain, from farms to handlers to processors to exporters. Through the liberalization era we might have stopped talking about the government's role, but the Canadian Grain Commission and a multitude of other agencies are alive and well, and engaged in all aspects of grain production and trade.

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 extend to grain-handlers, with every piece of equipment subject to health-and-safety rules. There are government-certified labs involved in testing and issuing reports, as well as a variety of channels engaged in inspecting export-loads.

Our grain classification systems have long been in place, and served as templates for most parts of the world. The original emphasis was on wheat and barley (board-grains) but with the shift to other crops they have been expanded with even more detail with crop-attributes -- our soybean standards truly stand out in differentiating our grades. Most importantly, our identity-preservation rules and procedures are truly outstanding, and of course are of crucial importance in containerized trades.

Going back to our core topic here, recasting our image on the world-stage, quality-assurance has to be the third pillar of our global promotional efforts, together with production-capacity and crop-variety. However, there is only so much we can do as just one portal-initiative; we need much more support and involvement from public-agencies and producer-associations to accomplish the intended paradigm-shift.

NEXT STEPS

The *paradigm-shift* we are calling for in the Prairie grain-economy involves three prongs: specialization in higher-value crops, shift away from bulk-trades to direct-sales channels, and containerized shipments to final destinations. Our mission is motivated by our observation that producer margins are already slim, at least for those who are highly indebted from past investments, and are likely to be squeezed further in the coming years under competitive pressure from low-cost exporters.

However, this is hardly a call for abandoning bulk-trades that provide secure and reliable sources of revenue, at least as long as they maintain their viability on the global stage. The alternative channels we are trying to establish offer the promise of higher-margins, but are not risk-free; we advise producers to exercise caution by carefully assessing the inherent trade-risks, and to the extent possible, rely on contract-sales to credible, thoroughly vetted buyers on secure payment-terms.

Also, we should note that though we see this as a viable *path-to-prosperity* for producers, change in this direction can only come over time, as producers make the appropriate risk-reward trade-offs in shifting their crop-base. We would call our strategy a success even if the shift to direct-sales channels was modest, 10-15 MT/yr in a decade, basically equivalent to the grain production growth increment from yield-increases in that time-frame, leaving bulk-trade volumes at their current levels.

At the outset we would like to issue a “disclaimer” that we are not a sales-portal; some visitors are still asking our trading-volume as if that was our mission. We do not trade and it is highly unlikely that we ever will; we are a *trade-facilitation* portal. We try to help producers reach out to end-markets by bringing new opportunities to their attention through the market-research we conduct. In time we also hope to attract direct-buyers to the region to procure all the crop-varieties they may need.

In just a few months since our launch we have been pleased with the traction that we have achieved; obviously many of our concerns over the future of the Prairie grain-economy are widely shared, and there is interest in the direction that we are trying to move this vital sector of our regional economy. However, these are just the early days; we are determined to not only grow our following but also deepen their engagement. We still have a long way to go in accomplishing our trade-mission.

To this end, you will see a major shift in our emphasis, in terms of what we publish as well as how we engage with our audience, through both the portal and social-media platforms. You will hear less about why we embarked on this mission, and more about what we must do in realizing our vision of a very different trade environment -- more specialized in high-value export-crops, geared towards direct-sales that we have no doubt will yield higher-margins, paving the way to greater prosperity.

In the coming months our efforts will be focused on the following six areas; then our trade-facilitation will get underway in earnest to start going after export prospects.

Market-research: We will give utmost priority to our market-research agenda, giving you more insights than just telling you what we are doing or intend to do. Our priorities will be as outlined earlier (Article #9) but as we attract more external funding for this purpose, that agenda will expand and intensify. We do not expect our geographical focus on Asia Pacific to change, but with more resources, we will be able to tackle more markets with industry-structure and supply-chain studies.

Portal-following: We are happy with the pace of growth in our following so far but as we move forward we want to accelerate that growth -- we won't be content until we reach every producer in the region. Also, we will pay more attention to deeper "engagement" by reaching out to producers to get their input with ideas, comments and suggestions. Accordingly, you will see us attend to our social-media pages more intensely, and also you will hear from us more directly through email campaigns.

Producer-meetings: Early in 2022 we will embark on producer-consultations, not electronically but in-person, coffee-shop or town-hall meetings. You will hear about the details early in the year, starting with Saskatchewan and extending to Manitoba and Alberta. At these gatherings, we want to expand on our mission, explain our strategy, and get feedback from producers -- we want to know whether we are on the right track, or need to change course, as this whole mission is in their cause.

Farm-profiles: We explained the importance of these profiles in extolling our virtues in export markets (Articles #5 and #10) -- putting across the advanced state of our farms is of critical importance in getting the attention of importers. We hope these will also turn into effective marketing tools for producers, individually or in groups. In the coming weeks we will embark on an invitation-campaign for this purpose -- we will not give up on pestering until we have not just dozens but hundreds of profiles.

Export-image: In the same articles we also emphasized the need for recasting our global image, from bulk-trades to specialty-crops. We advocated a three-prong approach in this regard, but cannot tackle the challenge on our own. We need producer-advocacy to push public authorities to give priority to this matter before we can expect our export-base to diversify to higher-value specialty crops. You will hear more on this topic from us in the coming months, as it is vital to our mission.

Buyer-targets: Once we make sufficient progress on these last two fronts, we will be ready to turn our focus to the buyer-targets we would have identified through our market-research efforts. By this time, we would have modified the *Prairie Profile* tab of our portal with a new image, projecting an advanced farm-economy, arguably among the most advanced in the world with a highly-diversified crop-base that can meet all the needs of importers, to be shipped in containers directly to their facilities.

It must be evident from these activities that our attention in the coming months will be sharply focused on individual producers, to get them engaged and provide their input into our mission that is clearly in their commercial interest. We will continue to emphasize the collaborative nature of our approach we outlined at the outset (Articles #3 and #5). Without active producer engagement and participation our strategy will not yield meaningful results; we will continue to stick to this approach.

However, we also recognize that there are producer-associations that represent their interests, associations that they fund directly or indirectly. The same associations can also play a crucial role in facilitating the diversification-initiatives and direct-sales channels we are trying to open up. To this end, with the launch of our portal we reached out to most of them with an email-campaign, but we have not received any response, let alone endorsement, encouragement or support.

We understand that we were not yet well-known, and our intentions may not have looked completely transparent; naturally we need to earn their trust and respect before expecting any support or cooperation. Also, at the time there were extenuating circumstances, impacts of a severe drought to cope with. We will continue our efforts but in the mean time call on all producers to reach out to the associations that they belong to with ideas on how they can be involved in our cause.

When we first launched our portal we also reached out to government agencies, federal and provincial, involved in agriculture and export-promotion. The response in this domain was not very encouraging; we had one response with a referral to another agency that did not lead to a follow up. We are going to launch another campaign with this compendium of articles, in the hope of a warmer reception.

As we outline in our last article (and make references throughout) any shift in our export-base is not going to be very successful without government endorsement and support. This is imperative in view of the need for recasting our global image, as in addition to extolling our region's advanced production-capacity and crop-variety, we flag our institutional strengths -- particularly with respect to our crop-classification and identity-preservation regulations. Again, we are relying on the producer-community to help us mobilize more support for our mission from public agencies.