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PROTEIN
ROUNDTABLE
POLICY REPORT

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BEEF AND PLANT PROTEIN: STRONGER TOGETHER

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EXECUTIVE SUMMARY

Governments should look at the beef and plant protein industries as one protein market with multiple commodities, say participants at a protein industry roundtable held recently at the University of Calgary. The synergies between the sectors can be used to present a strong, sustainable, trusted brand for the Canadian protein market, both domestically and internationally, driving investment for infrastructure and innovation that could improve Canada's global position for protein production and export. The government should consider developing policies and regulations that can help facilitate such a collaboration.

The roundtable of protein industry stakeholders was hosted by the Simpson Centre for Food and Agricultural Policy, an applied research policy institute at the University of Calgary's School of Public Policy, whose goal is to mobilize research for better policy-making and decision-making to realize a more sustainable agricultural industry. Discussing the challenges and opportunities for the beef and plant protein industries, the participants agreed that working together would offer many benefits.

By presenting a united front, the protein industry has a better chance of lobbying governments for mutually beneficial changes, attracting more investments for infrastructure to increase efficiency and reliability, educating consumers on the synergies between the industries and branding Canadian protein as a sustainable, reliable and abundant market. Branding is a key factor in the protein market — consumers, investors and governments need to see the plant and beef protein sectors as partners, not competitors. They need factual information from the industry — rather than be influenced by misperceptions spread by social and mass media — to be satisfied with the agri-products being produced and with the methods of production.

The roundtable participants cited one example of a synergy with benefits on multiple levels — using the by-product from plant protein production to feed cattle. This helps with sustainability in both the beef and plant protein industries, particularly with current global supply chain issues brought on by drought, conflict and other factors. It is also environmentally friendly and demonstrates that the industries can work together for each other's benefit. This type of innovative synergy would also improve consumers' perceptions of the beef and plant protein industries, besides driving investment and expansion.

Governments need to consider the opportunities that a unified protein market can provide for Canada. A strong, sustainable protein market has the potential for exponential growth, particularly with ongoing global supply chain issues and food security concerns.

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KEY FINDINGS

This roundtable engaged Canadian beef and plant protein industry stakeholders to identify priorities, challenges and synergies where the industries may collaborate in mutually beneficial ways. Researchers identified five themes that encapsulate the key points that emerged in discussions among participants:

- Policy and government relations
- Branding Canadian protein
- Communications and education
- Infrastructure dimensions
- Sustainability dimensions

There was consensus that, with the right policy environment to facilitate investment and collaboration, Canada can establish itself as a globally trusted and dominant hub in the beef and plant protein industries. Most participants agreed that Canada's beef and plant protein industries should focus on coming forward with a united front that highlights synergistic advantages to sustainability and the Canadian advantage of reliable supply at scale. We can find mutual benefits between beef and plant protein industries, and collectively these will address the priorities of investors, governments and consumers.

On a domestic and global stage, Canadian protein industries should continue to develop a strong brand as sustainable and reliable, with high potential for investment, innovation and expansion. Canada has reliable protein production at scale; investment in infrastructure can ensure the industries' sustainable growth. Plant protein processing capacity can increase through strategic policy and investment. Policy actions can facilitate the infrastructure required to make Canada a protein innovation hub and work with the government to promote Canada's emerging plant protein industry. A streamlined regulatory policy environment will encourage collaboration and investment to develop protein processing industries in Canada. Governments, investors and consumer concerns about sustainable protein sources are a key area in which to capitalize on synergies between beef and plant protein. Sustainable initiatives between beef and plant production could be as simple as diverting the starch by-product of plant protein production to replace some cattle feed. Supply chain transparency should be increased, especially in the plant protein industries, through improved metrics and data-sharing platforms. Protein industries need improved and cohesive communication with consumers, industry leaders, governments and policy-makers. With a united front, the sectors can communicate the advantages and potential of Canada's protein industries while tackling polarizing debates that pit the sustainability and nutrition of beef vs. plant proteins. Public perception and misconceptions can be better addressed through fact-driven education.

- Regulatory environment: The regulatory burden inhibits industry expansion and prevents the industries from reaching their full potential. Participants identified the need for a policy environment that encourages collaboration and investment to develop protein processing businesses in Canada.

- Traceability and transparency: Supply chain transparency should increase, especially in the plant protein industries, through improved metrics and data-sharing platforms.
- Environmental sustainability: Governments, investors and consumer concerns about sustainable protein sources are a key area where synergies between beef and plant protein industries can be exploited.
- Communications: Protein industries need improved and cohesive communication with consumers, industry leaders, governments and policy-makers. With a united front, the sectors can communicate the advantages and potential of Canada's protein industries while tackling polarizing debates that pit the sustainability and nutrition of beef vs. plant proteins. Public perception and misconceptions can be better addressed through fact-driven education.
- Canada's branding: On a domestic and global stage, it is advantageous to position Canadian protein industries as sustainable and reliable, with high potential for investment, innovation and expansion.

“Investment [in Canadian protein industries] should be met with a red carpet, not red tape.”

- Roundtable participant

POLICY RECOMMENDATIONS

Policy points covered through the discussions focused on how Canadian beef and plant protein industries can work together with provincial and federal governments to achieve mutually beneficial goals. Research staff aggregated recommendations made explicitly by roundtable participants, along with implicit suggestions to address the issues identified at the roundtable event as follows:

- Develop Canada's plant protein processing capacity through strategic policy and investment by government;
- A policy environment that reduces regulatory burden and encourages collaboration and investment to expand Canadian protein industries;
- Improved metrics and data-sharing platforms for protein supply chains;
- Facilitate sustainable initiatives between beef and plant production, such as diverting the starch by-product of plant protein production to replace some cattle feed.

Together, Canadian beef and plant protein industries have incredible potential to maximize growth and sustainability.

INTRODUCTION & BACKGROUND

The Simpson Centre organized a roundtable event in Calgary, Alberta, on April 7, 2022, that brought together industry leaders and stakeholders across Alberta and Canada representing beef and plant protein. The protein roundtable's objectives were to identify the sectorial opportunities of Alberta's beef and plant protein systems, highlight synergies among sectors and build a list of recommendations intended to inform investors and policy-makers to enable economic growth. In the context of current and future global demands, Canada's and Alberta's current position and future opportunities were discussed.

The event featured keynote addresses by Dennis Laycraft, executive vice-president of the Canadian Cattlemen's Association, and by Bill Greuel, CEO of Protein Industries Canada.

Key questions drove the discussions:

1. What should be the ambitious, achievable goals for Alberta regarding protein production and transformation?
2. What are the desirable infrastructures and services required to leverage Alberta protein industries?
3. How can the animal and plant sectors learn from each other?

Neutral moderators facilitated the three breakout group discussions, which centred on the above questions and additional questions (Appendix 1). Diverse stakeholders from throughout the value chain, all on equal footing, were present in each breakout group. Simpson Centre research associates gathered and summarized the content. Responses were analyzed for themes, areas that were echoed by many respondents and areas highlighted as critical or most important.

RESULTS & DISCUSSION

Researchers identified five themes that encapsulated the key points which emerged in discussions among participants:

- Policy and government relations
- Branding Canadian protein
- Communications and education
- Infrastructure dimensions
- Sustainability dimensions

POLICY AND GOVERNMENT RELATIONS

Lobbying with co-ordinated and actionable recommendations

Many participants identified the role of federal and provincial governments in supporting the protein industries. Currently, beef and plant protein industries do not present a united front with mutual interests to policy-makers. Stakeholders indicated that even plant protein sub-sectors often do not approach policy-makers with shared demands for policy. While industry groups no doubt need to lobby for policies that benefit them most, it would be good for all protein industries to dispel notions of rivalry and competition by lobbying for mutually beneficial policies. Politicians can be overwhelmed or confused, pulled in different directions by myriad voices throughout the industries with no clear policy prescriptions that benefit beef and plant protein industries and their sub-sectors. If the protein industries identify shared priorities and unify their message to policy-makers, they come together with a stronger voice that represents more jobs and value for the Canadian economy than any single protein sub-sector alone. The protein industries should present governments with actionable policy recommendations that incorporate the priorities of both beef and plant protein industries to set up politicians to make successful policies that work for industry. Many participants agreed that policy creation should be industry-led and government-supported to ensure the most direct, efficient and effective policy development.

Reducing regulatory burden

While policy creation is necessary to support protein industries, the current policy framework also needs to be streamlined. Many agreed that the regulatory burden imposed by current federal and provincial governments does not attract protein industry investment or expansion to Canada. Stakeholders reported facing significant delays when dealing with governments. The time and resources required to navigate permitting were cited as an example of how the regulatory burden slows or prevents expansion of the industries. Protein industries could gain a competitive advantage, attracting more talent and investment from other provinces and internationally, if the regulatory burdens were streamlined. Attracting international collaboration and investment across the protein sectors is important to their sustainability and growth. Governments can assist by building a policy environment that encourages international companies to expand into Canada. The placement of the French company Roquette's pea processing facility in Portage la

Prairie, Manitoba, was cited as an example of regulatory burdens standing in the way of attracting and expanding business opportunities. The \$600 million facility, which bills itself as the largest pea processing plant in the world and one of Manitoba's top employers, was attracted by Canada's world-leading production level of peas, but the company faced lengthy regulatory barriers before plant construction finally began in 2018. Participants called for a competitive policy framework that encourages a favourable investment climate to attract businesses to Canada and advocated for opportunities that are investment-ready when presented, to stimulate external investment and backing with less government interference.

BRANDING CANADIAN PROTEIN

A united message

All groups discussed the importance of how Canadian protein is branded to consumers, producers, policy-makers and investors on domestic and international markets. There was general agreement around a need to improve the branding of Canadian protein industries. Many participants called for a united message around Canadian protein, highlighting synergies rather than polarizing the beef vs. plant protein debates. Participants called for messaging that brings together the protein sectors so that consumers, investors and policy-makers see the synergistic strengths of these industries, thus reinforcing both sectors. Canadian protein should be presented as a united front to an international market, with strong branding of Canadian plant protein that follows the example of Canadian beef as a respected brand around the world.

Beef and plant protein competition

Achieving the goals for expansion of Canada's protein industries requires the beef and plant protein industries to work together. Participants referenced examples of farmer-to-farmer conflict between the beef and plant protein industries. There was consensus that these inter-industry disputes are a major barrier in the promotion of Canadian protein overall, and participants called for a unified position to promote Canadian protein domestically and on the global stage. Beef industry stakeholders called for setting aside inter-provincial competition within their industry, such as grass-fed Alberta beef vs. corn-fed Ontario beef.

Canada: A trusted, innovative and sustainable protein powerhouse on a world stage

Given disruptions in global supply chains and market volatility due to drought, conflict and other factors, securing a reliable supply of Canadian beef and plant protein is important for national and global food security. Several participants identified Canada as a potential major exporter to help meet the rising global demand for protein. Canada can become an epicentre of protein production and a global food innovation hub due to the country's abundant access to raw materials and potential to increase processing capacity.

Governments can assist in defining Canada's national and global reputations by highlighting Canada's strengths: the reliability of supply, the sustainability initiatives being undertaken, the trust in Canada's food safety standards, the potential and increasing level of investment in Canadian protein industries and the latest innovations in added-value protein products created with Canadian proteins.

Consumer priorities — and what's driving them

Participants identified the top concerns driving consumer protein purchases as nutrition and health, sustainability, price and social justice issues such as animal welfare and fair working conditions. These were considered significant considerations because consumer purchases help shape policy and determine real-world demand. There was concern that misinformation drives consumer priorities. Consumers are exposed to huge amounts of information disseminated by mass media. Examples included marketing campaigns such as A&W advertisements, and through polarizing social media debates that entrench the beef and plant protein industries into opposing camps. Social media was seen to polarize debates over the relative nutrition, environmental impact or animal welfare aspects of beef and plant proteins. Participants specifically pointed to the public perceptions of genetically modified organisms (GMOs) and wheat as related issues that result from misinformation.

COMMUNICATIONS

Educational opportunities for Canadians

Participants reported that consumers are hungry for science-based information behind industry claims about nutrition and sustainability. Previously, consumers seemed satisfied with simpler branding around these claims; for example, a package of beef labelled with a photo of pastoral farm scenes to signal sustainability without the data behind the claim. Now, consumers are generally more skeptical of industry claims.

Many participants discussed the need to make scientific education about protein more accessible to consumers. Discussions centred on how to increase a real understanding of the protein sector among Canadians using co-ordinated and targeted communications. Some pointed to the Australian curriculum for early integrated education about food issues. Others cited the need to develop and expand programs at universities. To do this, participants suggested working with educational institutions to develop new programs of study or expand Canadian food studies curriculums. Expanding university programs in food biotechnology, novel food innovations and sustainable crop and ranching innovations were examples of high-priority fields of study that target a future labour force in Canadian protein industries. Recruiting current or future students in parallel fields (e.g., tech,

engineering) into these target areas could be achieved by highlighting career opportunities and supporting recent graduates in finding employment. Promoting these opportunities could fill a future labour gap in the sectors and stoke innovation with “home-grown” specialists and experts ranging from veterinarians to technicians to food and crop scientists. Education and training can grow capacity and increase the economic benefits of the protein industries through education and employment opportunities for Canadians.

Information for policy-makers

Participants highlighted the need to communicate with governments on the approaches and benefits of Canada’s beef and plant protein production. Several participants suggested creating a protein advocacy group focused on grants and business opportunities in Canadian protein industries. Some called for making educational materials available to government leaders and international investors that highlight the Canadian protein industry’s advantages. Others suggested being part of a worldwide knowledge-sharing network to help address global issues related to protein production, such as greenhouse gas emissions and food insecurity in the face of climate change. Specific topics that were flagged as important subjects to engage in included improving communication about Alberta’s potential plant protein capacity, accessibility to high-quality data as a source of reliable information and the advantages of developing and supporting processing facilities in Alberta.

INFRASTRUCTURE DIMENSIONS

Discussions focused on the key role of infrastructure in facilitating the growth of Canada’s plant protein industry, with implications for actors along the supply chain from production to processing to retail. Stakeholders indicated that Canada is poised to become a global protein powerhouse if strategic investments in infrastructure are made. Participants highlighted the need for significant further investments into infrastructure to increase efficiency, growth potential and synergies between beef and plant protein industries.

Transportation

Discussions indicated that both beef and plant protein industries are dependent on rail and road transportation for their products. Improving and expanding transportation infrastructure could also help facilitate synergistic exchanges between the industries. For example, waste products after the plant protein is extruded from crops could be transported to ranches to be fed to cattle.

Processing facilities

Canada produces a significant amount of plant protein at scale. However, production of the raw materials does not guarantee that processing capacity will subsequently develop. Targeted policies need to support the research and development that will give Canada the processing capacity required to create innovative plant protein products for consumers. Canada’s beef industry is playing a role through investment in developing household-friendly beef products for the busy consumer. Just as transportation infrastructure can help facilitate synergies between beef and plant protein, stakeholders indicated the requirement for new processing facilities and related service industries such as packaging to support shared opportunities between these industries.

Supply chain transparency and tracking

Participants raised concerns around supply chain transparency and how better tracking from farm to table can be established, especially in the plant protein sector. This included calls to make tracking data from field to processing to retail open-source and available to all stakeholders and consumers. This requires improved metrics and analysis, and incentives for tracking and optimizing supply chain of custody through advanced technologies and comprehensive operations. Data should be shared and accessible across sectors in an open-access database, but the reporting burden should be external (i.e., not the responsibility of farmers or industry).

SUSTAINABILITY AND NUTRITION

Nutrition

While all Canadian protein has a high nutritional value, plant-based protein products often benefit from a superior image nutritionally. Consumers often see plant proteins as healthier than beef products, even when some meat-alternative products have similar nutritional content to beef products.

Sustainability

Sustainability was a key topic raised in all three breakout discussions as a major selling point for Canadian protein production. Consumers are largely aware of a significant difference in environmental impact (e.g., greenhouse gas emissions) between beef and plant proteins. In recent polls, the Canadian public reports being increasingly concerned about greenhouse gas emissions. Instead of seeing this as a challenge to the beef industry, participants re-framed this as an opportunity for synergy between beef and plant protein. The industries must find ways to leverage the favourable position of plant proteins to market the fact that, through collaboration, both industries can reduce their environmental footprint. One example of a sustainable synergy is by leveraging the starch from plant protein production into the cattle feed chain. Farmers growing ingredients for the plant protein industry can divert their by-product (i.e., the crop material after the protein is extruded from it) to feed cattle.

Sustainability was discussed from two perspectives: the challenges of expanding protein production and the environmental impacts of protein production. The first perspective concerned the challenges that exist as supply chain disruptions pose barriers to production. An example was that recent droughts have disrupted the price and supply of cattle feed, and the opportunity of addressing this challenge by using by-product from Canada's plant protein industry as feed rather than importing feed from the U.S. The second perspective focused on the environmental sustainability of beef and plant protein production. Specifically, participants identified the higher environmental footprint of beef protein — and the fact that consumers are aware of this. Participants pointed to innovations such as feed additives that reduce methane emissions of cattle, improved branding of sustainability initiatives and profiting from the synergies between protein sectors to reduce waste. There were suggestions to broaden income streams for farmers with land across sectors to include payments for ecosystem services.

CONCLUSION

This roundtable engaged Canadian beef and plant protein industry stakeholders to identify priorities, challenges and synergies where the industries can collaborate in ways that are mutually beneficial. On a domestic and global stage, Canadian protein industries should continue to develop a strong brand as sustainable and reliable, with high potential for investment, innovation and expansion. Canada has reliable protein production at scale; investment in infrastructure can ensure sustainable growth of the industries. Plant protein processing capacity can increase through strategic policy and investment. Policy actions can facilitate the infrastructure required to make Canada a protein innovation hub and work with the government to promote Canada's emerging plant protein industry. A streamlined regulatory policy environment will encourage collaboration and investment to develop protein processing industries in Canada. Governments, investors and consumer concerns about sustainable protein sources are a key area where synergies between beef and plant protein industries can be capitalized on. Sustainable initiatives between beef and plant production could be as simple as diverting the starch by-product of plant protein production to replace some cattle feed. Supply chain transparency should be increased, especially in the plant protein industries, through improved metrics and data-sharing platforms. Protein industries need improved and cohesive communication with consumers, industry leaders, governments and policy-makers. With a united front, the sectors can communicate the advantages and potential of Canada's protein industries while tackling polarizing debates that pit the sustainability and nutrition of beef vs. plant proteins. Public perception and misconceptions can be better addressed through fact-driven education. Together, Canadian beef and plant protein industries have incredible potential to maximize growth and sustainability.

APPENDIX: QUESTIONS DRIVING BREAKOUT DISCUSSIONS

LEVEL 1 QUESTIONS

What should be the ambitious, achievable goals for the province regarding protein production and transformation?

What are the desirable infrastructures and services required to leverage the Alberta protein industry?

LEVEL 2 SUB-QUESTIONS - DIMENSIONS OF ANALYSIS

As the discussion progressed at each breakout group discussion, a number of more in-depth questions were considered, such as the following:

How can the animal and plant sectors learn from each other?

What can we see as potential roadblocks to the long-term vision in each industry? Name three potential roadblocks and explore them with potential action items to pursue.

Where in the supply chain are there gaps that impact the industry value proposition — currently? — in five years? — in 10 years? Critique potential solutions/improvements to strengthen the supply chain — short term — long term.

Prioritize the top three challenges for each industry in the next five years/10 years — what is the number one challenge? Develop three actionable steps to approach solutions to this challenge. What are the tools/resources needed to improve our ability to solve these challenges.



ABOUT THE SIMPSON CENTRE

The Simpson Centre for Food and Agricultural Policy is an applied research policy institute at the University of Calgary's School of Public Policy. Our goal is to mobilize research for better policy-making and decision-making to realize a more sustainable agricultural industry. Strengthening the sustainability of agri-food and agri-business means increasing food production to feed a growing global population, while attending to social and health impacts and the natural environment. The Simpson Centre connects researchers, citizens, industry and government to scientific issues critical to the future of Canada's agricultural and food system. Our three key areas of research are agriculture and society (population health and environment), agriculture and economics (sustainable productivity) and agricultural literacy (public education and outreach).

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