

Progress & Prosperity

Canada's \$25 Billion Opportunity in Ingredient Manufacturing, Food Processing and Bio-products



Agriculture and food is at the forefront of Canada's economy

As agriculture is the largest employer in the nation, and a major contributor to our GDP, we need to embrace the opportunity it presents for our country. A strong agriculture and food sector can be a resilient economic driver for Canada now and in the future.

It is hard to argue with the necessity of food. While industries evolve to keep pace with change, food is a constant. And will always be. It may not be marked by a swift transformation, but it will be resilient, relevant and sustainable forever.

More so, Canada must always be a trusted global supplier. Very few other countries can replicate

our natural advantages of land, weather and sustainable practices. With the increased demand for high protein ingredients and food, Canada is on the brink of a generational opportunity — and that is in ingredient manufacturing, food processing and bio-products.

Agriculture needs to be at the forefront of Canada's industrial policy. The agriculture and food value-chain, from plant-breeding to plate, represents seven per cent of Canada's GDP and employs 2.3 million Canadians. One out of every nine jobs is created by the agriculture and food manufacturing sector.

Capturing value across Canada's crops sector

Canada's crops sector is recognized by endless fields of wheat, oat, barley, canola, soybeans, lentils and peas - as well as emerging crops such as fava beans, lupin and hemp. These endless fields of sustainably produced valuerich crops are Canada's strength. And a part of what makes our agriculture sector so important. As a nation we need to embrace the opportunity crop production provides and focus programming and investments into the three main links along the agrifood value chain:

1. Link One: Primary production Building on our strength as an agricultural powerhouse, with more than 28 million hectares of arable land, Canada must continue to invest in activities that will support improved yields and the continued sustainability of crop production. This includes areas such as genetic improvement, irrigation infrastructure and the application of beneficial management practices such as 4R fertilizer application and variable-rate technologies.

2. Link Two: Value-added processing (ingredient manufacturing, food processing and the creation of bioproducts)

Value-added processing includes the familiar, such as flour milling and canola crushing, and also new manufacturing methods such as wet and dry fractionation of canola and peas to create protein concentrates and isolates, new methods of milling to produce protein-rich flours from pulses such as fava bean, hemp and field peas, and the further conversion of these ingredients into novel food, feed and industrial bio-products. This is an area of untapped opportunity for Canada. An increase in processing capacity

can bring a further \$25 billion to Canada's economy annually and 17,000 new jobs. To do this Canada must be intent on growing this sector.

3. Link Three: Trade infrastructure and policy

As we increase yields and domestic processing, the ability to serve export markets becomes even more important. As a nation we need to continue to develop markets, such as the Indo Pacific region, as an important customer for Canadian goods. The pursuit of trade agreements and supportive trade policies, as well as the infrastructure to get product to market, such as port infrastructure, is critical to the growth and stability of Canada's agrifood sector.

Supporting a climate strategy through agriculture

Countries around the world are grappling with their solutions for climate change. Here in Canada, we need to recognize that our agriculture sector is an important part of our climate strategy. We will reduce our carbon emissions by continuing our sustainable agricultural production practices, which make our farm and pasture lands some of the most effective carbon sinks in the world. More so, our unique and diversified three-crop rotation of pulses, oilseeds and cereals reduces the impacts of insects and diseases and lowers the need for inputs.

This was supported when, in 2022, the Global Institute for Food Security commissioned a Carbon Life Cycle Analysis to examine the carbon footprint of agricultural production in Saskatchewan, Western Canada and Canada. The results demonstrate that Western Canada is producing some of the least carbon-intensive crops in the world. Western Canada grows the majority of Canada's field pea acres, and in a remarkably efficient manner. In other jurisdictions around the world, greenhouse gas emissions for field peas are orders of magnitude higher—well over 1,000 per cent higher than Canada's emissions.

Strengthening link two through increased ingredient manufacturing and food processing in Canada

The largest opportunity for Canada's agriculture and food sector and Canada's economy is in increasing domestic value-added processing. Under our existing model of commodity export, economic growth is incremental – relying largely on increasing production. By also increasing domestic processing capacity, we can reap the benefits of increased production, while also capturing the benefits of valueadded processing and a \$25 billion in new economic value every year.

To capture this \$25 billion opportunity as a country, we need to focus on three areas:

- 1. Enabling capital investment;
- 2. Increasing productivity and GDP through innovation; and
- 3. Market diversification and expansion.

Enabling Capital

With the average cost of construction for an ingredient processing plant exceeding \$100 million, capital is critical. In many cases, ingredient manufacturing companies struggle to access the equity capital required to construct and commission commercial scale facilities. They require infrastructure-like investments and timelines but have a venturecapital-like risk profile. This makes it difficult for them to access capital through traditional sources and, currently, there are little to no financial tools available to help initiate projects. This is creating a challenge in allowing companies to scale-up and build large ingredient processing racinics.

WWW.THEROADTO25BILLION.CA | 3 ingredient processing facilities.

The Way Forward

When it comes to enabling capital, the need is to catalyze the initial investment, while also making ingredient processing more attractive for investment. Learning from other emerging sectors, such as clean energy , we know that Canada can attract the investment necessary to support large capital projects.

- 1. The creation of a \$200 million capital infrastructure program by a Canadian federal lending agency to provide long-term patient equity necessary to allow companies to secure the balance of equity and debt financing for facility construction and commissioning.
- 2. Evaluate and implement policies to accelerate investment into ingredient processing and support collaboration across industries: Policies, such as flowthrough shares and tax credits, can help to incentivize private investment into ingredient processing, while also stimulating growth in related industries such as bio-fuels and food and feed production.

Outcome: The building of several new ingredient processing plants throughout Western and Central Canada, which will support the creation of 17,000 new jobs.

Improving Canada's productivity and GDP through innovation

Canada needs companies that are innovative and ready to make an investment into our country's future and prosperity. Companies that create economic wealth, create jobs, commercialize IP and improve our productivity. It is well recognized that a strong relationship exists between innovation and prosperity: countries with higher rates of innovation tend to have higher rates of productivity. In Canada we need to embrace innovative companies and create the business environment that allows them to invest and succeed. More so, we need to choose sectors that demonstrate the ability to improve Canada's productivity – agriculture and food being one of only two sectors whose productivity has increased since 2019. This is evidence of the potential of the sector, and the opportunity to create new, innovation-based jobs in Canada. As a country, we need policies and programming that support innovation, commercialization and scale-up of companies, leading to a more productive and prosperous Canada. We need to focus on the efficient use of resources into emerging and sustainable growth opportunities.

The Way Forward

Recognition and signalling that agriculture and food, with a focus on ingredient processing, food manufacturing and bio-products is a priority for Canada. Recognition by

the federal government sends a strong signal to the private sector, and other levels of government, about national investment priorities. This signalling must be communicated through and supported by:

- 1. Innovation programming that works for Canada's agrifood sector: Agriculture and food, based on its contribution to GDP, currently does not receive a proportional share of national innovation investment. As a sector, primed to drive future economic growth and improve Canada's productivity, innovation programming needs to consider the sector as a priority area. To start, current innovation programming needs to be reviewed to understand the current gap and changes made to ensure support going forward.
- 2. A regulatory system that is consistent and predictable, and responsive to business: Evaluate and make steps to implement a self-affirming approval system for novel ingredients and foods modelled after the Generally Regarded as Safe (GRAS) system in the United States.
- 3. Focussed and coordinated investment attraction: Signal

to provinces and municipalities to be competitive in attracting agrifood investments with a focus on competitive land acquisition costs and utility and transportation infrastructure. The support of an "All of Canada approach," with alignment between federal, provincial and municipal governments is necessary to create the right conditions to attract investment.

Outcome: Increased innovation, more business investment, improved productivity and an increase in GDP per capita.

Market diversification and expansion

As the United States looks to be on the brink of further protectionism and the rules that govern global trade relationships are disrupted, Canada needs to continue to form deep relationships with customers who rely on Canada for food. The Indo-Pacific represents a large opportunity for Canada, and we must continue to look beyond our historical trading partners.

The Way Forward

Canada is an export nation. We have the potential to be a provider of some of the most important products needed globally. We need to continue to invest in both the infrastructure and relationships to ensure Canada continues to supply the world with what it needs.

- 1. Trade infrastructure investment: Implement the findings of the "Restart, Recover, and Reimagine Prosperity for all Canadians", specifically the recommendation to "invest in strategic trade infrastructure that addresses critical bottlenecks", including rail infrastructure and efficient rail service.
- 2. Build strong international relationships with markets such as the ASEAN region, and further collaborate with provinces to improve trade relationships with key export markets.
- 3. Continue to pursue free-trade agreements with the United Kingdom and India.

Outcome: In-demand, high-value Canadian products being exported to international customers, with more value and jobs being created in Canada, directly benefiting Canada's economy and our position on the global stage.

Working together to create a stronger agricultural sector

As the global population increases, so will the demand for food. One of the major needs will be for protein – from all sources – plant and livestock. Growing Canada's ingredient processing capacity positions Canada to be the protein supplier of choice for billions of people around the world. Working together – with crops and livestock – we can grow both sectors to strengthen the industries domestically, while also being key players in global value chains.

Creating value for farmers and beyond

Canola – and the canola crush sector – is a Canadian success story. From research work completed at the Universities of Saskatchewan and Manitoba, to revolutionizing Canada's agriculture sector, the bright yellow flowers and heart-healthy oil have become a symbol of prosperity and sustainability. As we look to increase value-added processing of other high-protein crops such as peas, we can use the canola crush sector as a proxy to understand why increasing value-added processing is important to the entire value chain, from farmers to end markets.