

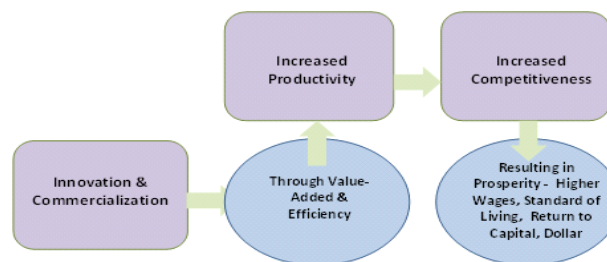
Innovation and Competitiveness – A Policy Brief¹

There are many ways to think about competitiveness. AAFC defines competitiveness as “**the ability to produce profitably and to maintain long-run viability, in relation to competitors, for relevant markets**”.² A Task Force examining the competitiveness of Canada’s agri-food sector determined that it was the “**ability to profitably gain and maintain market share in the domestic and/or export market**”³. A 2010 review of the same issue by the House of Commons, which identified a host of issues impacting the competitiveness of Canada’s agri-food sector, defined competitiveness in a similar fashion as “**the ability of a firm to produce and sell products that allows it to gain market share while providing an adequate return to the resources employed in the production process.**”⁴

Michael Porter’s work has been instrumental in shaping thinking about competitiveness at the national level. For Porter, the **key to competitiveness is productivity**. “The only meaningful concept of competitiveness at the national level is productivity. The principal goal of a nation is to produce a high and rising standard of living for its citizens. The ability to do so depends on the productivity with which a nation’s labor and capital are employed”.⁵

Productivity is typically thought of as being the value of output produced by a unit of labor or capital. It has two components: **value-added and efficiency**.

- “Higher value added comes from adding innovative unique product or service features for which consumers will pay more than the added cost to the producer.
- Efficiency gains come about from any number of different process innovations: better organization of work, automation, improved economies of scale, etc.”⁶



The ignition in the process of enhancing competitiveness is innovation/commercialization which is the application of new ideas to products and processes used in an industry. It is an **input or driver of greater value added and efficiency**. Thus it is a driver of productivity growth which results in enhanced competitiveness. Final outputs include higher wages and returns to capital.

¹ This policy brief presents some key findings of “Competitive Advantage of the Canadian Agri-Food Sector”, October 2010 by David Sparling, Richard Ivey School of Business and Shelley Thompson, SJT Solutions. The paper was commissioned by the Canadian Agri-Food Policy Institute.

² AAFC, Overview of the Canadian Agriculture and Agri-Food System of 2009”, 2009.

³ Coffin G, B Larue, M Banik and R Westgren, “Competitiveness in the Canadian Food Industry”, CJA, Volume 41.

⁴ Standing Committee on Agriculture and Agri-food, House of Commons, “Competitiveness of Canadian Agriculture”, May 2010.

⁵ Porter M. On Competition. Harvard Business Review. 1998

⁶ Institute for Competitiveness and Prosperity, “Setting Our Sights on Canada’s 2020 Prosperity Agenda – Report on Canada 2008”, 2008.

- “Sustained productivity growth requires that an economy continually upgrade itself. A nation’s companies must relentlessly improve productivity in existing industries by raising product quality, adding desirable features, improving product technology, or boosting production efficiency.”⁷
- “Small annual improvements in productivity growth, if sustained, add up to substantial improvements in living standards over time. A 2% compound annual increase in output per worker implies that it doubles in about 35 years.”⁸

Public policy and industry strategy help shape competitiveness. How the industry positions itself relative to competitors will influence its competitiveness. Porter argues that there are three generic positions for firms/industries to choose from. It can attempt to compete on the basis of cost and uses economies of scale and cost control to do this. In the second approach, the firm/industry attempts to differentiate its products. Branding, design or product features, and customer service are some of the ways that can be used to achieve this goal. The final approach is to focus only on one particular segment and serve it better than competitors through either more differentiated products or lower cost products.⁹

Public policy and industry strategy will influence the choice and success of a particular competitive positioning. For example, R&D which focuses on yield enhancement will have a different outcome than R&D which focuses on the development of value added traits at the consumer level.

Public policy can attempt to enhance competitiveness by identifying and fixing problems in the market that reduce competitiveness.¹⁰ **It can also focus on innovation.** Brinkman agrees with this prescription suggesting that support for R&D and improvements to market efficiency will improve competitiveness. Providing subsidies to producers, however, will not impact competitiveness – it only buys market share.¹¹ **Policies to enhance productivity must align with the type of productivity occurring in the sector.** For example, policies/programs supportive of innovation should be used when a major source of productivity growth is the development and adoption of new technology. On the other hand, if productivity growth is occurring because of consolidation of the sector or other structural changes, then policies attempting to slow structural change will slow productivity growth and reduce competitiveness.¹²

⁷ Porter M. On Competition. Harvard Business Review. 1998

⁸ Statistics Canada, “Productivity Performance in Canada, 1961 to 2005”, September 2007.

⁹ Porter M. Competitive Strategy: Techniques for Analyzing Industries and Competitors. 1980

¹⁰ Van Berkum S, “The Role of the Government in Enhancing Competitiveness of the Agrifood Sector”, 2004 Workshop on Enhancing Competitiveness in the Agro-Food Sector: Making Policies Work.

¹¹ Brinkman G, “Report Card for Prairie Agriculture”, CJA, Volume 50, 2002.

¹² Stewart B, T Veeman, and J Unterschultz, “Crops and Livestock Productivity Growth in the Prairies: The Impact of Technical Change and Scale”, CJA, Volume 57, 2009.